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THE
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—OF—

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Original Communications.

ON ASYLUM MANAGEMENT.*

BY JOSEPH WORKMAN, M.D., TORONTO.

With your kind permission I would now avail myself of this final opportunity of speaking a few words on some matters of much interest to yourselves, to the afflicted ones consigned to your care, and to society at large. I must, however, frankly forewarn you that my observations may, to some of you, savour more of the leaven of censorious comment than of gratifying approbation; yet, remembering the indulgence awarded to me by the the association in past years, with whatever freedom I may have expressed myself on every subject under discussion, and feeling perfectly confident that the highest recommendation to your polite attention is your reliance on the sincerity of the speaker, I dismiss from my mind every apprehension of severe criticism, and addressing you as reflecting and liberal men, who thoroughly comprehend the truthfulness of the proverb, "Faithful are the wounds of a friend, but deceitful are the kisses of an enemy," I shall endeavour to tell you, with becoming frankness, what I think of some of the harmful exuberances, and a few of the defects, of your general asylum administration; and I wish it to be kept in mind that I desire not to be understood as restricting my disapproval of existing errors or faults to institutions south of the great boundary line, but as falling on those of my own land, wherever they may chance to present.

I start with the general proposition that much government is, in all departments of life, a fundamental evil, and too much government is, in all human affairs and relations, a blunder that invariably and inevitably defeats the true purpose of all

government; and when government is not only redundant in quantity, but also hurtful in quality, I can conceive no shorter or surer road to anarchy and corporate ruin. It is my belief that no small proportion of American asylums are too much governed, and that some of them have been sadly misgoverned. I am not blind to the fact that in any country which has achieved free popular institutions, and in which all public affairs must be conducted in conformity to the dominant suffrage of the electoral body, there must be great difficulty in convincing the multitude that there are some affairs in which they may be lacking in that cautious discrimination and stability of purpose which are essential to final success; and I freely admit that the conservation of the grand central blessing of national liberty must have paramount consideration. It rarely, however, happens that consciousness of the possession of power does not prompt to its exercise, and too often power is exercised merely for the sake of demonstrating its possession. In all such instances there will be much government, and very certainly not a little misgovernment. Some of you may have heard of the precocious little girl of eight years, who one morning said to her mother, "Mamma, may I be married?" The surprised dame answered, "What makes you ask that foolish question?" To which the bantam woman rejoined, "O, because I wish to let the children see a wedding." And just so it is with many bantam men, "dressed in a little brief authority," that do strut and cackle most vociferously. If they do not make the "angels weep," they certainly draw huge groans from many a poor devil under their authority. One of the greatest evils connected with the administration of your asylums is that of the uncertainty of the tenure of office of superintendents. It is impossible to glance over the lists of a series of years without being struck with the appearance of the many new names, and the disappearance of old ones, presented. It is, however, very gratifying to me to find the names of so many old friends still lingering in the Eastern and Middle States. I rejoice to see that New England and her old neighbours appear to cherish so much of the conservatism of the Mother land. I feel well assured that the asylums of Maine, New Hampshire, Massachusetts, New Jersey, Pennsylvania, and New York, by their so long retaining their well-tried men, have consulted the best in-

*Abstract from a paper read before the Association of Medical Superintendents of American Asylums for the Insane, in Toronto, on 14th June, 1881.

terests of the insane, and of their entire communities ; and I may safely include in this category some others—as those of Boston, Rhode Island, and Hartford, whose superintendents retired after long periods of service, carrying with them the strong regrets of their governors and of the public at large. I accept it as an indisputable fact that the incumbents who have thus so long held their positions have well merited the permanence of their tenure of office ; but if this be so, why should not the rule be universal ? Surely the Eastern and Middle States enjoy not any monopoly of good men. That the rule is not universal some who now hear me, and far too many of those who once heard me, could but too amply and painfully testify. At the close of the last meeting of this association, attended by me, at Madison, I had the painful intimation of the dismissal from office of a very energetic and, as far as I knew or have since learned, a very efficient superintendent, in his absence at that meeting. Such a procedure was surely more worthy of the autocrat of all the Russias than of the governing body of an American State Asylum ; and yet, I fear, it was no isolated instance of the capricious and cowardly official murder of a deserving public servant.

In Canada, fortunately for public officers, and, as I believe, for the public service, every Government appointment, and the majority of important corporate appointments, are understood and expected to be as durable as the good behaviour of the incumbents, which virtually is equivalent to life-long. I have even heard it said that it requires very strong pressure to effect the dismissal of an inefficient officer. It is also a well understood maxim in our departments that it is the moral duty of the chiefs to defend all their servants, and to see that they shall not suffer from unjust accusations. This system works well, and our men generally work well under it. The man who enters the public service under the expectation of this tenure has the very strongest inducement to acquit himself of all his duties zealously, fearlessly, and honourably ; but he who knows not the day he may be turned adrift, and cast, perhaps, poor and broken-hearted on the world, has only meagre encouragement to be either active or honest. Nor can I think that the mitigation of this evil, under the system obtaining in some States, of periodic renewals of lease of office, by repetition of election

every five or other number of years, is any very substantial improvement, for it is with you an unfortunate contingency that not only is it expected that every man shall exercise his electoral suffrage, but whoever fails to do so is regarded as a Philistine, and he must suffer decapitation accordingly. If, however, it be true, as I have heard often reported by your own people, that asylum superintendents, in common with other public officers, owe their appointments most largely to political influence and party energy, we need not be surprised when we see them floated out of office on the same wave on which they swam into it.

It would be presumptuous in me to commend for your adoption anything having no higher prestige than mere British or Canadian usage or merit ; yet I do believe you would be large gainers by a quiet retracement of your steps in the matter of important appointments to office, the good and satisfactory working of which depends in so large a measure on matured experience ; nor would I have you stop here, but I would go yet further and recommend the expediency, as well as the justice, of awarding to superintendents and other faithful officers a competent retiring annual allowance, graduated on their length of service. This is the rule in British and other transatlantic asylums. It has become the rule, though in a more limited degree, in this province, so that every officer or employé is granted a retiring allowance, in a lump sum, which is determined by the length of his or her service. The obvious object and tendency of this system is to induce every one engaged in the service, from the chief down to the scullion, to continue long, and behave well in their respective spheres. I regard it as equally just and politic. I must not forget here to add, that although public servants in Canada are not prohibited from exercising their electoral franchise, yet it is recommended to them by their superiors to abstain from so doing, and I have always regarded this exemption from party exposure as a valuable civil boon. I would close my observations on this part of my subject with the following quotations from a recent number of an able popular American journal, and allow me to say that I would not myself presume to speak of the Civil Service of the United States in similar severe terms :—

“There is no doubt whatever,” says this writer,

"that the work of the country has been, and still is, incompetently done, and no doubt whatever the 'spoils doctrine,' as it is called in party politics, is the source of incalculable corruption and incalculable degradation."

Again, this writer says of the unhappy exigencies of a public officer, "He is always to feel that he cannot keep his place by any excellence of work, or any superlative fitness for it, but only by intriguing and showing himself ready to do the dirty work of the party on whose good will he depends."

The severity of these strictures forbids comment by an outsider.

The next evil to which I would allude, as calling for serious consideration, is that of the interference of governors or trustees of asylums with the appointments of assistants of any class or grade; and the same remark applies, with even greater force, to all higher authorities. I assume it as a certainty that every superintendent is capable of best judging of the fitness and competency of all his assistants, and it consorts with common sense that he will endeavour to procure, and to retain, the best he can find; and if not, he is unfit for his position, and the sooner he is released from it the better. It is, however, a fact which calls for no illustration that any employe, of whatever grade, who owes his position to the influence of any person above the superintendent or independent of him, can never prove to be a reliable or obedient officer or servant; for he believes, and too often knows, that his continuance in the service depends more upon the influence that first secured it than on his own good behaviour. There no doubt are worthy exceptions to this rule, but they are not so numerous as to disprove it. During my own rather long tenure of office, I had the high satisfaction of total non-interference on the part of my superiors in this relation, and I would fondly hope my successor has had the like experience. I could not desire for him a greater curse than its opposite.

An evil of unspeakable virulence in connection with the administration of American asylums, but for which it is just to say the governors are not accountable, is the frequency with which groundless charges of misconduct or mismanagement are brought against the medical staff and their assistants. I need not particularize instances of this grievance, for you are all better acquainted with

them than I can be. So far as I can remember nearly all these accusations have been the concoctions of discharged bad servants, or of imperfectly recovered patients, whose lingering insanity has underlain their moral obliquity. It is, however, truly lamentable to observe the extent of popular credence awarded to these calumniators, and it is badly calculated to elevate our conception of the primal purity of human nature to find that so many people are anxious to believe evil of their fellow-men, and to rejoice more in the hope of verifying iniquity than of discovering innocence. It is true that in every instance that has come to my knowledge the accused have come out triumphantly vindicated; yet who but themselves could tell—if indeed human language could depict—the mental agony, the wear and tear of brain and nerve, the writhings of conscious innocence, "the spurns that patient merit of the unworthy takes"—all too often endured under an augmenting bodily debilitation which invites the shaft of death, or renders imperative the relinquishment of office? Of how many this has been the fate their bereaved and sorrowing families best could tell! Is there no remedy for this evil? Must its recurrence become a perpetuity in your country? To tell me that it will recede before the march of a higher popular culture and intelligence would be but to ignore the fact that yours is the best—or at least the most largely—educated nation in Christendom, and to ignore the yet more pertinent fact that the pernicious accusations here complained of rarely, if ever, have their origin among the uneducated portion of the population. They are trumped up by persons possessing more intelligence than moral honesty, and they are cherished into pestilent vigour by those who have had but too much education.

It occurs to me that your institutions for the insane stand in need of some protecting breakwater that might withstand the force, or avert the fury, of the wave of popular delusion. That your local boards of trustees have not, in many instances, proved adequate to this service will be readily admitted by all who have suffered from the defect. It is my belief that a central governmental supervision by one or more well qualified, discreet officers, whose function should be that of vigilant and thorough—not merely perfunctory—inspection of the condition and treatment of the patients, and

of everything relating to their well-being, and whose duty it would be to report at stated periods to the Governor of the State whatever they might deem proper or useful to be made known, might meet your requirement. It would not be advisable that such officers should exercise any immediate control or direction over the financial affairs of the institutions, or have anything to do with the giving out of contracts, or the buying and selling operations, so long at least as your local boards of trustees, deserving of public confidence, continue to be appointed; for I would not merely that such inspecting officers be unsuspected of favouritism, but I would place them above all reach of suspicion. As a matter of course, and a means of protection to your boards against unjust accusations or insinuations, all their transactions should be submitted to the inspectors, whose duty it would be to report faithfully any observed impropriety. Speaking from my own experience, I do not hesitate to say that I always regarded this sort of governmental supervision as my best protection against misrepresentation or revengeful slander, and I must add that the only instance in which I suffered from these occurred before the establishment of our governmental inspectorship, when a local board failed in their duty of prompt and thorough investigation.

I would now crave your attention for a few minutes longer to a subject of a different character, but of no less public importance than the preceding ones, and perhaps, as some of you may fear, of no less practical difficulty. It is the establishment of a thorough system of alienistic medical training, by means of which there would be produced an adequate supply of competent and efficient candidates for the various positions from time to time becoming vacant in your asylums, and a better knowledge of insanity would be diffused throughout the profession of medicine. I think every experienced and closely observant superintendent will admit that a considerable lapse of time is required to convert a new assistant, however complete may have been his collegiate curriculum, into a useful asylum officer; and very few can entertain the belief that any course of mere didactic teaching, apart from thorough clinical observance and instruction, can ever meet the requirements of the position.

I am aware that in some of the asylums of

America this matter has had consideration, but not to the extent, nor in the practical direction, that I should deem necessary for the end I would recommend to be held in view. I have recently been favoured by Professor Tamburini, Director of the Asylum of Reggio Emilia, in Italy, with a number of the *Gazetta del Frenocomio di Reggio*, at the end of which I have read with much gratification a notice to students and graduates of medicine of the practical operation of a system of training which seems to me to give promise of great public utility. I shall here introduce a translation of those portions of the above notice which appear to me most pertinent to the object I have in view. It reads as follows:—"The Asylum of Reggio, from its central position, its material and moral improvements, effected in late years and still in progress; from the large number of patients which it contains, and which constitute an abundant material for practical study; from its being the seat of clinical psychiatry of the Royal University of Modena, in which all the practical prelections are imparted to students; from the scientific laboratories with which it is furnished, rich in instruments, and in every means of objective and experimental research; from its being the seat of the direction and editing of the *Rivista sperimentale di Frenatria e Medicina Legale*, and consequently from the great number of scientific journals received in exchange, which enrich its library, already copiously supplied with works relating to psychiatry, it is now generally recognized as the best adapted institute for theoretic and practical instruction in this science, uniting all the opportunities for a complete education, both in the scientific sphere of the specialty, and the technicalities of management. It has therefore been designated by the Minister of Public Instruction as one of the institutions in which young men may obtain interne positions in order to perfect themselves in their studies, and already several young physicians who have completed their psychiatric studies have brilliantly distinguished themselves.

"In order to obtain the position of a medical practican it is necessary to send in application with the diploma of graduation and all those documents which may show the distinct capacity of the candidate to the medical director, with whom rests the nomination.

"The medical practicans have residence in the

the asylum, together with free lodgings, food, light, fuel and attendance.

"Besides the daily visits and all the clinical and experimental exercises, they are required to attend, assist, and in case of absence to supply the places of, the other medical officers in the treatment of the patients and the construction of the histories of the cases; to attend the daily clinics, and to keep records in necroscopy; to aid in supervision of the service, and to give assistance in the psychiatric clinique, and in every other requirement of the institution, under the instructions of the director.

"These posts last for not less than six months, and not longer than two years.

"Practicants are also admitted for shorter periods, without the obligation to serve as the others; but these receive only lodgings in the asylum.

"Applications may be presented in any month of the year.

(Signed). "G. FORNACIARI,
"President of the Commission.
"A. TAMBURINI,
"Director of the Asylum."

It appears to me that the preceding programme is as liberal and complete as could be desired, and it does high honor to the Government of Italy that that it has been induced to initiate a system of instruction so practically meritorious. Whether it would be possible to introduce some similar system in this country, I confess I am unable to foresee. For many years during my own asylum service I was able to carry out, on a small scale, a kindred arrangement, under which I was permitted to award residence and board to three young men engaged in the study of medicine, in addition to my regular assistant physician. Two of these young men were allowed moderate salaries, which by their fidelity and usefulness they well merited. I can appeal to my successor and his *confreres* in the three other asylums of Ontario whether the services rendered by these young men since my retirement have not been of very great value to the country. It would not become me to say more in their praise.

It has been with much regret that I have seen my cherished plan abandoned in all our asylums. I abstain from giving expression to my conjectures

as to the reasons of our Government for making the change. I must, however, declare my belief that it has been a very unwise one, and a step in the retrograde direction, equally injudicious as regards the advancement of practical psychiatry, and unjust as relates to the interests of the medical profession and of humanity.

I now bring these, my last words, to a close, begging that you will regard them as those of a parting friend, whose love of your specialty, and high esteem of all its members, will endure as long as God may prolong his mental integrity.

PERNICIOUS PROGRESSIVE ANÆMIA. WITH NOTES OF A RECENT CASE RESULTING FATALLY.

By JOHN S. KING, M.D., Toronto, Surgeon to the Andrew Mercer Ontario Reformatory for Females, and Industrial Refuge for Girls.

(Read before the Ontario Medical Association, June 1st, 1881.)

The interest and importance attaching to Pernicious Progressive Anæmia—a disease, the etiology of which is generally obscure; the diagnosis so largely differential; the progress so persistent and pernicious; the treatment so unsatisfactory; and the prognosis so unfavorable—is my excuse for inviting your attention to its brief consideration, in the hope that it may aid the aggregation of reliable clinical facts, and prompt to fuller pathological investigation, by which more knowledge may be gained, and more satisfactory results attained in dealing with the disease or condition.

It will be admitted that in the rarity of this disease, we have an obstacle to its easy recognition. The literature of the subject is limited in extent, and comparatively recent, being largely embraced by the last decade. It is true that some writers on the subject have attempted to assign to it causes or origin; and have classed cases under one or other of several causes. But, with our limited knowledge, and the infrequency of meeting cases in practice, can we be justified in asserting that it is a distinct disease? May not pathological research discover some uniform change of structure in some organ or part of the body, of which the blood change is pathognomonic? I incline to the opinion that it will be generally admitted that the most that can be positively said is that the causes assigned for the existence of Pernicious

Progressive Anæmia, are, at best, but possible, or perhaps predisposing; and that the problem of its true origin still remains to be solved.

The conditions under which cases of Pernicious Anæmia originated have been differently grouped by different observers and writers on the subject. Dr. Howard, of Montreal, in his admirable paper read before the Centennial Medical Congress, held at Philadelphia in 1876, gives nine groups, embracing some sixty-two cases, as follows:—
1. Pregnancy:—2. Parturition (these two being most frequent):—3. Chlorosis:—4. Chronic Diarrhœa:—5. Blood-waste (direct and indirect):—6. Dyspepsia:—7. Poor Diet:—8. Jaundice:—9. Cases with no antecedent condition, other than failing health.

In nearly every case where the microscope and hæmacytometer have been employed, it has been found that there is no actual increase in the white blood corpuscles, though a relative increase exists. On the other hand, there appears to be uniformity of opinion that there is deterioration of the red globules in number and in quality, with other probable blood changes. The health standard of the red globules in the male, generally adopted, is 5,000,000, per cubic millimeter, with a slightly less number in the female. The globular richness of blood has, however, been shown by Cutler and Bradford,—who have extensively investigated the subject—to be subject to variations due to location, general causes, time, &c., in the individual. A striking fact ascertained by means of the hæmacytometer, as first pointed out by Dr. Gowers, Assistant Professor of Clinical Medicine in University College, London, is that the corpuscular richness of the blood is seldom accurately represented by the appearance, either of the skin or mucous membranes. In Pernicious Progressive Anæmia the number of red globules falls far below the normal standard. In one of Dr. Gowers' cases reported in 1877 the number was 1,660,000; and in the other 1,640,000 per cubic millimeter. Dr. Osler, of Montreal, reports a case where the number was reduced to 970,000. In the case which I bring before your notice to-day the number is still further reduced and has been computed at 625,000 per c. m.

The diagnosis of Pernicious Anæmia is largely differential, or one of exclusion. The prominent clinical features are a small quickened pulse;

increased respiration; elevated temperature; general debility, rapidly progressive and eventually extreme; well-defined vascular murmurs at the base of the neck, and systolic basic murmurs of the heart; a smooth waxy appearance of the skin, and peculiar tint; profound anæmia without obvious cause; and the peculiar blood changes of which reduction of the number of red globules is the most noticeable. The clinical history of the recorded cases points to a gradual assumption, without a fixed date of beginning, of an anæmic condition and general debility of all parts of the body, which continues progressively, eventually becoming excessive, and resisting successfully all remedial agents, resulting, with scarcely an exception, in death. Tonics, food and hygienic measures, indicated in an ordinary anæmic condition, fail utterly in this form of anæmia. During its course there cannot usually be found any apparent abnormality in the glandular system, or of any of the thoracic or abdominal organs. In the foregoing we have the chief points in the clinical aspect of a disease or condition which appears to have baffled medical treatment. Of course there is diversity in symptoms, some appearing in one case which are absent in others. In one case there may, for instance, be epistaxis, or other hemorrhages; in another, a persistent diarrhœa; in another group of cases neither of these two symptoms may present during any part of the course. The duration varies in recorded cases from five weeks to three years. The prognosis is almost invariably unfavorable.

I beg now to invite your attention to a recent case in my own practice, the patient being under observation for nearly nine months. I was not fortunate enough to secure an autopsy, and am, therefore, only able to give the history and clinical aspect of the case, which are given in extended detail as the origin is obscure.

E. P. B., aged 27 years 7 months, at death, Canadian by birth, residence recently, Toronto, married. On the 25th of August last I attended her in her first accouchement, which was a very satisfactory one, resulting in the birth of a healthy well-developed girl. There was nothing abnormal to note. The placenta was expelled in a few minutes, and there was not more *post partum* hemorrhage than is met in the average of cases. On the third day she complained of insomnia,

which readily yielded to bromide of potassium. On the seventh day, as she had no appetite and complained of feeling weak, I ordered aromatic sulphuric acid, tincture of nux vomica, and tincture of iron. Sept. 3rd, I found her sitting up enjoying fair appetite and strength and in good spirits.

Her health antecedent to the confinement was exceptionally good, the catamenia regular and normal—never had exhausting discharges, diarrhoea, epistaxis or hemorrhage of any kind. The family history was free from hereditary disease. I saw her mother, a brother and two sisters, all of whom had a robust appearance, and confirmed her own statement as to her own excellent health anterior to her confinement. The only ailment she had in adult life was a tendency to constipation of the bowels. I did not again see her until the seventh week after confinement, when I advised a repetition of her tonic, as her appetite was poor and her strength somewhat impaired from nursing the child. She used the tonic for a few days, and "feeling all right," as she termed it, did not renew her bottle. She was in easy circumstances, and had no cause for mental anxiety or undue physical exertion. During the 12th and 13th weeks, she consulted me twice for some trivial matters, and learning that she was almost wholly confined to the house, I advised outdoor exercise and a continuous use of her iron tonic for some time.

Three months elapsed before she consulted me again, or on the 26th week after confinement. On this occasion she appeared slightly anæmic, felt weak, and was easily tired. Her appetite was very poor. I observed aphthæ on the tongue and inner aspect of the lips and cheeks. She complained of occasional diarrhoea. There were no headaches, dizziness or pains; no cerebral symptoms, no hemorrhages, no lochia. She felt, as she termed it, "low-spirited without any cause for it." I ordered iron, quinine, acid, and nux vomica, with wine.

The following week I saw her. The diarrhoea being troublesome, I stopped the tonic and gave her ordinary remedies for diarrhoea. She complained that nausea was induced by the taste and even smell of certain foods. The following day there was improvement in the diarrhoea. Three days subsequently (27th week) she complained of a burning sensation in the mouth, stomach, and bowels, and could not take the iron and quinine

mixture. This was accordingly stopped, and in lieu thereof I gave her chlorate of potash, tr. cinchona co., tr. nux vomica, and arom. spts. ammon. I also advised the weaning of the babe, which was complied with.

During the next fortnight (28th and 29th weeks) she appeared to improve very little, but took more nourishment. The dietary included oysters, beef-tea, eggs, and wine; milk alone disagreeing with her, lime water was added to it, but it did not even then agree with her. Cod liver oil, in the form of hydroleine, was advised three or four times daily.

I did not again see her until the 34th week. She had become profoundly anæmic, and was much thinner and weaker. Her muscles were soft and flabby, her frame emaciated, her lips and gums were blanched, eyes pearly, skin of waxen appearance, and of a peculiar light lemon tint, differing in that respect from any case I had before met. It was not as well defined as the tint of a cancerous cachexia, and differed from a jaundiced tint, or bronzed skin. Its temperature was warm, and it was free from all moisture. There was still no dizziness or headache, but an inclination to fainting and a condition of extreme lassitude. On this occasion, for the first time, I noticed a puffiness of the eyelids, while the ankles and feet were cedematous to such an extent as to make it very difficult to wear her slippers. I examined the urine, which was free or very nearly free from albumen, and was slightly acid, having a spec. grav. of 1010. I could discover no casts. I found well marked anæmic murmurs over the jugular veins, and systolic murmurs at the base of the heart, with slight tenderness in the latter region, but no apparent enlargement or valvular lesion. The lungs were normal, but the breathing was quickened, the respirations reaching 24 per minute. There was moderate tenderness over the pit of the stomach and abdomen. The liver and spleen were of normal size. The pulse was small, compressible and regular, but recorded 100 per minute; temperature 99 $\frac{3}{4}$. I gave her, on this occasion, gentle galvanic currents, one electrode being applied over the pneumogastric nerve in the neck, and the other over the heart, lungs and stomach in rotation. She was most sensitive to the current when the electrode was placed over the base of the heart. She was advised to continue

the iron, quinine and nux vomica mixture as well as hydroleine.

April 19th—Three days after the foregoing examination, the cedema of the ankles and feet, as well as puffiness of the eyelids, had diminished a trifle.

April 23rd (35th week)—I found the weakness increasing, pulse 110, temp. 100 $\frac{1}{4}$, resp. 27. The cedema still further diminished. She complained of vomiting and a total inability to retain her tonic. The diarrhoea had reappeared with greater frequency of motions. Ordered starch and arrowroot for food, the hydroleine to be continued in drachm doses four times a day, and diarrhoea mixture as before. Another examination of the urine was made with no marked change.

April 26th—The vomiting and diarrhoea still continue unabated. I prescribed Bismuth and Dover's powder.

April 28th—Pulse 112, temp. 101, resp. 28, and the diarrhoea still persisting. I continued the Bismuth and pulv. Doveri, adding plumb. acet., to be taken as before.

May 4th (36th week)—Up to this date she has never been wholly confined to her bed. I advised her to remain in bed. Pulse 120, temp. 101 $\frac{1}{2}$, resp. 30. The respirations throughout have held the ratio of nearly 1 to 4 of the pulse. Still uses hydroleine, also arrowroot, and occasionally a little lime water, but cannot take the milk.

May 6th—Dr. Graham saw the case with me and made careful examination without discovering any lesion. As the diagnosis appeared to be between Pernicious Anæmia and Leucocythæmia, it was decided to make an examination of the blood on the 8th.

May 7th—Lactopeptine in combination with Bismuth was administered in the hope of controlling the vomiting and diarrhoea. She partook freely of buttermilk to-day, which she appeared to relish and did not vomit.

May 8th (37th week)—Dr. Graham again saw the case with me, and trial was made of the Syr. Pyrophos. Ferri. et Quin. et Strychniæ (Wyeth's) in 10 drop doses, and enemata of starch, tincture of opium and fluid extract of hamamelis, of the last two, a drachm each, while the Bismuth and lactopeptine were continued internally. However, two days' trial of these had not the slightest apparent influence in checking the diarrhoea. On this

occasion a microscopical test was made of the blood. A small drop was with difficulty obtained from the finger-end, the penetration of the needle affording scarcely any pain. Its appearance was very watery, slightly tinged red. On the glass it was evident at once that there was great paucity of red globules, and but few white ones. There was scarcely any disposition to form rouleaux, and where an occasional one existed the number of globules was very small. We observed very little irregularity in size, more in shape, some few were inclined to pear-shape, others elongated. The natural shape was retained by the greater number. There were no giant corpuscles met as mentioned by Dr. Osler, nor Schultze's granular masses. Their color was pale and the surface slightly irregular. The work of computing the number was delegated to Dr. Sweetnam, whose estimation is 625,000, or the eighth of the normal standard of the male.

May 11th—Pulse 128, temp. 102, resp. 30.

May 12th—Pulse 130, very weak; temp. 103 for the first time, resp. 30 and labored.

May 13th—The puffiness of the eyelids and cedema of the ankles and feet had entirely disappeared. The patient asked for nothing, had involuntary evacuations from both bladder and bowels. She no longer vomited, had a listless look in the eyes, was much emaciated, and presented a waxy appearance; respirations 40; the temperature was not taken, and the pulse was barely perceptible. She died the following morning.

Never after her lying-in period did the catamenia appear, nor was there any lochia or epistaxis, or hemorrhage of any kind. The character of the dejections was bilious throughout. There were neither twitchings nor paralysis, and the intellect remained clear.

Dr. Sweetnam's analysis of the urine is herewith appended:—Urea, 11.5 parts in 1000; phos. acid, 1.15; albumen, a mere trace; spec. grav., 1010; color, lighter than normal; uric acid, undoubtedly below normal standard.

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BELLADONNA IN PERTUSSIA.—Dr. Jacobi considers belladonna the most useful drug yet used in whopping cough. To be of service, however, it must be given in doses sufficient to produce flushing of the cheeks; the quantity being gradually increased, as toleration is established.—*Chicago Medical Journal and Examiner.*

PRESIDENTIAL ADDRESS.

(Delivered before the Canada Medical Association in Halifax, N.S., August 3rd, 1881.)

BY WM. CANNIFF, M.D., M.R.C.S., ENG., TORONTO.

[After expressing his thanks for the honor the Association conferred upon him by placing him in the position he occupied to-day, said, that he had decided, although somewhat a departure from the course hitherto pursued, to bring to the attention of the Association and the profession generally afresh the code of Medical Ethics which this Association adopted at its organization, hoping at the same time that the attention of the public might become engaged in a consideration of the mutual obligations and responsibilities resting upon the medical profession and the public at large.] There are some facts, some points, and some considerations not referred to in the Code, with which it may be desirable to deal.

The Code of Medical Ethics of the Canada Medical Association consists of—

1. The duties of physicians to their patients, and the obligations of patients to their physicians.
2. The duties of physicians to each other, and to the profession at large.
3. The duties of the profession to the public, and the obligations of the public to the profession.

1. It is one of the first and almost continual difficulties met with by the medical practitioner in administering to the needs of his patients, to give only the necessary attention a case in practice requires, and secure the approbation of his client. On the one hand he wishes to bestow the requisite time and thought necessary to restore the patient or allay pain, as far as the resources of medical science will enable him. On the other hand, he is often fearful that his attention may be considered unnecessarily diligent or prolonged. It is, therefore, most necessary that the physician should be fully imbued with the responsibilities of his office, consider the necessities of the case, and then unhesitatingly devote such time and energy as he believes the case demands, regardless of any other consideration. At the same time it is not improper for him to exceed what he may think necessary should the patient wish to have extra attention.

When two or more cases simultaneously claim the attention of the physician, he is bound to give the most urgent his first consideration, irrespective of the position of the patient, unless relieved of responsibility by another practitioner. The response of the physician to a professional call should always be prompt, notwithstanding the fact that he is too often summoned in unnecessary haste, and put to great inconvenience, when he might safely have made the required call in his ordinary daily round of duties. Those who have had experience know full well that there are some thoughtless or selfish people who, when they have decided to call in the doctor, desire him to neglect every one else, and come at once with all possible speed, regardless of his other duties and obligations, or his own convenience. But the physician who feels the duty he owes to those who confide in his care, will charitably make allowance for the natural anxiety which has culminated in his services being sought, and should betray no annoyance because he may have been called with unnecessary haste, and has had his arrangements for the day, perhaps, destroyed. At such times not only the sick, but the sick one's family, may not be quite responsible for their precipitate conduct.

Under all circumstances the demeanour of the physician should be calm and his words tranquil. He must not be gloomy at any time, but treat the case with a smile and all the quietness of manner it will permit. The physician should ever come into the sick chamber as a sunbeam, never as a thunder-cloud. Again, he ought to be natural in his manner. No two are alike, and every one has his peculiarities; and for one physician to try to pattern after another, is to detract from his self-reliance, and diminish his usefulness. I trust it is unnecessary for me to say to the members of the Canada Medical Association that it belongs exclusively to the charlatan to magnify the danger or nature of the disease he is called to treat, so that the recovery which will follow, perhaps, would follow without treatment, may seem to betoken great skill on his part. The most skilful and observant physician is often unable at first to determine the nature of the malady he has to contend with; but it is no disparagement in the minds of the ordinarily enlightened public to honestly state he is as yet unable to say positively what may be the matter.

Now and again we have to endure annoyance

after expressing our opinion candidly at the bedside, wishing to conceal nothing from the patient, by a member of the family, in an outer room, or at the gate, or, it may be, by a neighbour on the road, asking the question, "Now, what is your opinion? I will not tell any one." But an ever-repeated reply, that you have already given your opinion to the patient, will in time educate the public that you do not tell two stories. Of course there are occasionally cases when you cannot state fully your views in the presence of the patient; but it is a safe and proper rule to conceal nothing from him. He should know the worst as well as the best, especially when you think he is sick unto death. It is wrong to deceive, and a mistaken view that for him to learn and understand the danger, will militate against recovery. To allow one to approach the dark valley, ignorant of the terrible and solemn fact, is, in my opinion, inexcusable. On this point I am somewhat at variance with what is laid down in the Code; but I have no hesitation in saying, from experience I believe that the course I have recommended can be pursued without discouraging the patient, depressing his spirits, increasing the danger, or hastening a fatal end. No doubt "the life of a sick person can be shortened, not only by the acts, but also by the words, or the manner of a physician," as stated in the Code; but the considerate physician can so blend a true statement of the case with every reasonable ground of hope that no additional element of danger will result.

The relationship between physician and patient is one of confidence and trust. Fidelity and honor as the custodian of secrets connected with the patient, are strictly to be observed. To betray such confidence, or in any way refer to him, so that even an injurious construction can be placed upon your words, is a violation of confidence. Yet, at times, it may be difficult to observe so manifest a rule of duty. In illustration, permit me to refer to an instance in my own experience. Not very long ago while in professional attendance upon a respectable employee in a leading hotel, I declined to answer all the questions of the manager as to the nature of the illness, (it was not a question of contagion,) whereupon I received a threat of expulsion from the building.

Moreover, to quote the language of the code, "The obligation to secrecy extends beyond the

period of professional services; no circumstance connected with the privacies of personal or domestic life, infirmities of disposition, or stain of character, observed during professional attendance, should ever be divulged by the physician, except when he is imperatively required to do so."

In seemingly hopeless cases you are required "not to abandon the patient. Your attendance may continue to be highly useful to the patient and comforting to the relations around him, even to the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish." While it is your duty to candidly state your opinion when you consider the case hopeless, you must remember, not merely the old adage, that "while there is life there is hope," but that in many cases the physician is mistaken in measuring the resources of the patient's constitution to resist and overcome disease, as well as the efficacy of his treatment. It is no infrequent occurrence to have a patient seemingly stricken with a fatal malady unexpectedly rally, perhaps for a time, perhaps to recover. I have repeatedly known the too conscientious physician superseded by the assumptious charlatan, or sectarian doctor, who reaped the benefit of the previous skilful treatment, in connection with the unsuspected power of nature to restore. It is only a few weeks since I was told by a doctor of divinity that one of the most distinguished specialists in the United States had been actually poisoning him by his treatment, and would soon have killed him if he had not been induced to go to a homoeopathic establishment. Here, he affirmed, in less than forty-eight hours, he was rescued from the "current of death," and new life was infused into his system. From my knowledge of the history of the D.D., who I may say was never a patient of mine, and of the deserved reputation of the physician accused of poisoning him, I have no doubt the latter was the means of preserving his health and senses so far as he now possesses them.

The physician, old as well as young, should never object to or discourage *consultations*. In fact he should be the first to suggest one. Consultations are desirable when life seems to be in danger, or when the case is a protracted one and does not yield to treatment. The physician may feel satisfied that he quite understands the case, and how to treat it; but he must consider the wishes of those concerned and the natural solicitude of the family. Moreover, very often it is a relief to have another to share the responsibility.

It need not be considered a reflection on the physician's skill to have a consultation, even with a junior. When a young practitioner, I remember a consultation with me was objected to on the ground that it would be bringing coals to Newcastle. At the same time it must be said that a consultation may be, indeed, I fear often is, detrimental to the patient. Apart from the injurious effects the excitement may have upon the patient, it must be admitted that the consultation too often leads to a compromise, and the views of neither as to treatment are fully carried out, while the treatment of either might alone have proved successful. I read lately an extract from one of Bulwer's novels in which he defines a medical consultation as "a meeting of physicians in which the counsellors agree with the attending physician, and change the treatment." It would be in many cases a more correct statement to say that the attending physician would probably have modified, or changed his treatment at that particular juncture in the case, if a consultation had not been held. When the attending physician suggests a consultation he is usually asked to name the person he would prefer; but it is often desirable to have one chosen by the patient. It is needless to say that in the event of the physician selecting a counsellor he should obtain the services of one he deems best qualified to render him assistance in the management of the case. When the patient makes the choice, unless the one chosen be unqualified, the attending physician should unhesitatingly accept the proposal. But the physician will positively refuse to consult with one not belonging to the regular profession. It is no part of the physician's duty to his patient, in any case, to depart from this rule. A demand is sometimes made that the physician shall have in consultation one who gives to himself a specific name,—who belongs to some *pathic* school. The regular physician possessed of the honor which belongs to a learned profession, and imbued with the spirit of scientific medicine, detests any distinctive appellation in addition to physician. The followers of a sectarian school delighting in the name of homœopath, have applied to the scientific physician the term "allopath." But we recognize no such distinction. We profess to be simply scientific physicians and surgeons. Not long ago a great cry was raised by the public, especially in England, because when a great statesman was the patient, a member of our profession refused to degrade himself by consulting with a homœopath. Sir Wm. Jenner was censured unsparingly by the press because he would not violate his principles and meet Dr. Kidd. The reply to this unwarrantable attack upon our profession, by the *London Lancet*, sufficiently covers the ground, and is quite to the point. "There was nothing personal in this refusal. The course taken was that to which every practitioner of scientific medi-

cine must have felt himself impelled. No grounds exist for consultation between the ordinary physician and the professor of a particular school. Medicine is not a science which admits of sectarian views. If two mariners, one of whom believed the earth to be a flat disc, while the other held the commonly-received hypothesis of its spheroidal form, were asked to act together in navigating the same ship on a voyage round the world, how could they co-operate? We do not wilfully refuse to meet homœopaths; we simply decline because it would be a grim farce and a practical imposition to do so. The result must be a failure of justice to the patient, which may jeopardise his prospect of recovery. The course which practitioners should pursue in an emergency of this kind is very clear." These views of the *Lancet*, a journal which represents the profession of England, are the views of the profession everywhere. We are not called upon to contend with homœopaths. We may believe them to be sincere in their profession; but we can have nothing in common with them.

Another duty of the physician to his patient is to give him judicious advice, when he has become convalescent, as to the future. This advice may refer not alone to his physical and mental well-being but also to his moral behaviour. Sometimes the sickness has been due to the faulty or vicious life hitherto led; and with the bed of sickness have come earnest resolutions to reform and lead a new life. In such cases happy the physician who can from the fullness of his heart strengthen good purposes and give proper guidance. "A word spoken in due season how good is it."

The first and second paragraphs of our code are as follows: "The members of the Medical Profession, upon whom so many arduous duties are imposed, and who are required to make so many sacrifices of ease, comfort, and health for the welfare of mankind, have certainly a right to expect that patients should entertain a just sense of the duties which they owe to their medical attendants. The first duty of a patient is to select as his medical adviser one who has received a regular professional education. In no trade or occupation does mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowledge is intuitive.

The patient or the guardian should deliberately select the physician, and having done so, should not hastily, or without sufficient reason dismiss him, or call in another. There is a class of people who are continually trying a new doctor; some on account of a constitutional love of change, some because the new doctor is recommended by Mrs. Busybody, or Mr. Touter, or Miss Interested, and some again make a change to be in fashion. Others seek a change from mercenary motives, or because they do not care to attend to a long-stand-

ing, unpaid bill. To this class it is, perhaps, useless to speak about the ordinary principles of honor and decency. There can be no doubt that a physician who has become acquainted with the peculiarities of the constitution of a person or family, has a much better prospect of treating him, or them successfully than one who has no such previous knowledge. Having made a selection, there ought to be implicit trust on the part of the patient; and he should be candid and open in his communication. It is neither safe for the patient nor just to the physician to conceal anything of a physical or mental nature which bear any relation to his disorder. But while the patient should state everything which may aid the physician in the discharge of his duties, he must not make him the repository of extraneous secrets, nor should he take up the physician's time in talking about irrelevant subjects. The physician is not a talebearer and dislikes to hear gossip. At least such should be his character. * * * *

Many persons, thoughtlessly, no doubt, will, while under the care of one physician, seek the opinion and advice of another. I do not refer to a class (I hope not large) who are ever seeking the opinion of medical men respecting their ailments in a casual way, with no intention of offering a fee; but to cases in which the patient is already under treatment, and who deliberately go to a second physician, and perhaps a third, to obtain an opinion, concealing from each the fact that he is already a patient. This is unfair and dishonourable, as any physician may by the use of different terms and language convey the idea of an opinion at variance with that of another, when in reality he holds views precisely the same. It is also reprehensible to call a physician to see a patient under the care of another, which fact is only learned when he reaches the patient; or perhaps he is kept in ignorance. This is gross injustice. We are now and then censured for refusing to see, or prescribe for a patient under such circumstances. It is not many weeks since I was called out of bed and requested by one, whose family I attend, to visit a man supposed to be hopelessly sick, who, I was informed, was under the care of another physician. I was asked to see the patient alone. Of course it is unpleasant to offend a friend, still my duty was obvious. In reply to my suggestion that the attending physician be notified for a consultation, I was somewhat sharply charged with "red-tapeism." Now, I know that my friend in this case spoke without consideration of all the duty which rests upon the physician. This is not merely a question of medical etiquette, the welfare of the public is involved. The principles which guide the profession not only protect its members from interfering with the rights of each other, but are a safeguard to the public. If medical men were in the habit of following the footsteps of one another,

one prescribing to-day, another to-morrow, and so on according to the behest of vacillating and fickle persons without knowing what the other has done, it would be impossible to treat patients intelligently and with any prospect of affording relief. And yet because the physician consistently refuses to act so obviously absurd a part, he is sometimes not only censured but abused by those who it might be supposed would understand better. It is not long ago that a leading newspaper in the Dominion deliberately stated that "medical etiquette was responsible for a great deal of suffering and death," and that "the medical profession abounds in abuses." These grave and sweeping charges we may hope were made in supreme ignorance of what belongs to a learned and honorable profession, and what is due by that profession to the public. It is always open to the patient to change his doctor, but an honorable person will not do so without the gravest reasons. If the physician be doing what he can for the patient, it is most unjust to dismiss him in an extreme case of sickness.

Those who have been at any time in practice will have experienced a great difference among patients as to considering the convenience of the physician. I suppose we all are afflicted with patients who almost invariably send for us at inconvenient hours. In the country the farmer often will wait until he has finished his day's work, probably because he cannot spare a horse before that time to go for the doctor. The consequence is that he frequently reaches the physician's residence just as he has retired to bed; and you may depend upon this—it is the one who first secures a day's work out of his horse and then drives the tired brute, who will be the one to object to your bill for night service. In the city may be found those who invariably send the summons for the physician after he has started on his daily round, so that when he comes home, he has to retrace his way at once, for this class are usually very urgent in their request. There is also a class who make it a rule to call upon the physician at the hours for meals so as to catch him at home. Now, while the physician will cheerfully respond to any call when an emergency makes delay impossible, and a timely notice is out of the question, and will leave his bed or the table uncomplainingly, it is manifestly inconsiderate and exacting to cause him inconvenience, and infringe upon the hours required for refreshment and repose.

One more duty of the patient toward the physician I will refer to,—namely, to make a proper, and, if possible, prompt acknowledgment for services rendered. Why is it that the doctor's bill should so often be the last paid? And there are some who feel offended when the physician renders his account under six months or a year. The physician rarely asks for his fee when called upon,

and it should be a matter of honor with the patient to pay for services without waiting for an account to be rendered. I am speaking of those who would scorn to be regarded as intentional defrauders; but there is a class of beings, I can hardly say human, who, no matter how much care and anxiety they have given the physician, never will remunerate him, probably give abuse instead.

"2. It is derogatory to the dignity of the profession to resort to public advertisements, or private cards, or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician. In the case, however, of a physician or surgeon commencing the practice of his profession, or removing to another locality, a simple announcement by an unobtrusive card in the public prints is unobjectionable."

To the foregoing I would add, that it is objectionable for the physician to resort to any unusual method of making himself known or spoken about. By peculiar personal dress, or manner, or equipage, or office-surrounding, to gain the attention of the public, is unprofessional. Eccentricity is no longer regarded by the discerning public as an indication of genius or skill; nor will, what I may be allowed to call *loud* manners, secure the most desirable *clientèle*. There is another mode of attracting the public attention none the less, a violation of the code of professional honor still pursued by a few, namely, making unnecessary display in the performance of surgical operations. And in connection with this I must refer to the unjustifiable practice, perhaps I should say criminal practice, of performing an operation without the slightest expectation of benefitting the patient. For a surgeon to mutilate a body, or increase the suffering of a patient afflicted with an incurable disease, merely to exhibit the operator's knowledge of anatomy and steady hand, is to make him an object of scorn and loathing. A surgeon who will perform, of two operations, the more dangerous one because it may give him a name, is unworthy of esteem, and should the unnecessary operation prove fatal he would be really guilty of manslaughter.

Upon the duties of physicians in relation to each other, I need not dwell, as their principles are usually inculcated when the medical education is received, and are strictly observed by the high-minded physician; and I have already made some remarks bearing upon the subject. But I may remind you, and I wish I could remind some who are not present, that in case of consultations the

strictest punctuality is demanded. I regret to have to say that now and again we meet with one who, because of his standing, thinks he may transgress this law of good manners. But the law is so manifestly just that no excuse can be accepted for careless delay in keeping professional appointments. And this law applies to cases of hospital consultations as well as to private practice. No one, however much a senior or uplifted, has a right to withhold from any one he meets in consultation the treatment due to a *confrère*. For one to seek at a consultation by any mode to produce an impression upon the patient, or his friends, that the attending physician is untrustworthy, or that he himself is wiser and more skilful, is a gross violation of the golden rule upon which our code is founded. True greatness is always retiring and considerate for the feelings and character of others. It is gratifying to believe that instances of unprofessional behaviour in this respect are becoming less and less frequent. If in consultation a physician cannot accept the opinion and views of another, and believes that the welfare of the patient is involved, it is his duty to adhere to his decision, and if necessary to withdraw from the case. But such instances are extremely rare. In the words of the code.—

"All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants—they must equally share the credit of success as well as the blame of failure. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favor of families and individuals." * * * * *

The physician in active practice requires yearly a rest from its cares and responsibilities. In seeking recreation he has a right to ask a neighbouring brother practitioner to officiate for him. No physician will decline to render such a service. Of course, if the period of absence be prolonged, or the absentee is rather in the pursuit of amusement than recreation, he should not receive from him who labors the fees earned. A physician who is thus trusted by another will not, if an honourable man, endeavour by artifice or intrigue to alienate the patients from their regular attendant.

The instances where a physician is justified in visiting the patient of another practitioner as a friend are very rare. If urgent business or relationship make a visit necessary, the physician will be scrupulously careful to avoid even the approach to a consideration of his disease or of the treatment being pursued.

While the physician will always consider it a

pleasing duty to give professional attendance to a neighbouring *confrère*, or his family, when asked to do so, without remuneration, he should not be requested to travel any distance or sacrifice much time without the offer of an *honorarium*, nor should he hesitate to accept it.

By mutual understanding there should be adopted in every community a tariff of fees, to be strictly observed by all. To depart from this on the part of one is to make him chargeable with double-dealing and adopting a disreputable mode of gaining popularity.

"3. As good citizens it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens. They should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on the subject of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations—and in regard to measures for the prevention of epidemics and contagious diseases; and when pestilence prevails, it is their duty to face the danger and to continue their labors for the alleviation of the suffering, even at the jeopardy of their own lives."

It must be said the public are not disposed to recognize the services of the medical profession, and to avail themselves of their scientific knowledge for the welfare of communities and the State. The salary for a medical health officer, or fees for professional services, are usually grudgingly paid. Notwithstanding the continued efforts of the profession to educate the public in sanitary laws, and prevail upon legislators to enact such laws and create such organizations as will prevent sickness and prolong human life, there seems to be a settled indifference on their part. It might be supposed that conduct so unselfish, indeed so calculated to diminish the ordinary work of the physician—and at the same time to secure a saving to the individual, to communities, and to the State—would engage the warmest attention of the rulers of the land. However, I am glad to be able to say that there is a probability of some action being taken by the Dominion Government. A Committee was appointed by this Association at its last meeting, "to continue communication with the Dominion Government, with a view of securing a grant towards carrying out an effective system of health registration." When the report of this Committee is presented, you will learn that the Premier, Sir John A. Macdonald, is not indifferent to the representations which the medical profession have made to him regarding vital statistics and State medicine, and that, had not illness prostrated him last winter, (an illness which I am sure all Canadians deplore,) steps would have been taken ere this to meet the wishes of this Association so far as the Constitution will permit.

Before concluding, allow me to express my deep concern that the continued sickness of our respected General Secretary has made it necessary for him to resign his post, a position he has so long worthily filled. I am sure you will unite with me in wishing his speedy restoration to health. As you can understand, the absence of Dr. David, who was quite familiar with our Constitution and the working of the Association, is a serious loss to myself in the discharge of my duties; but I am thankful to say that Dr. A. H. Wright, whom I requested to act as General Secretary, has, in making the arrangements for this meeting, very adequately filled the vacancy so unfortunately made.

I than you, gentlemen, for the kind hearing you have given me, and beg you will generously aid me in the work which falls to me as your presiding officer.

Correspondence.

CHLORAL IN STRANGULATED HERNIA.

To the Editor of the CANADA LANCET.

SIR,—The following case may interest some of your readers:—

July 10.—Was called to attend J. C., æt. 28. Found that while handling some 16-feet green planks, two hours before, he had sustained an accident in the shape of a direct inguinal hernia of the right side. At first the tumor was small, but the access of vomiting and tenesmus had caused it to increase till, on my arrival, it was about the size of a new-born infant's head.

Taxis was at once applied in the usual manner, but, though persevered in for about three-quarters of an hour, not the slightest reduction was effected, while repeated attacks of vomiting rendered, for the present at any rate, hopeless any attempt at relief in this direction. A high febrile condition, and a quick pulse, continued to give gravity to the situation, and it was felt that all of a surgeon's art must be called into requisition. The hernia was evidently, for the time being, irreducible, and probably would become strangulated. The administration of an anæsthetic and a possible operation loomed in the immediate future, but professional assistance not being at hand, I resolved to try milder means for removing the spasm at the neck of the hernial sac. Consequently the following was prescribed:—

R. Chloral Hydrate	ʒij.
Potas. Brom.	ʒj.
Morph. Sulph.	gr. ʒ.
Aquæ	ʒij. M.

SIG.—Half to be taken immediately—the remainder in half an hour.

I revisited him in two hours, hoping to have more success with the Taxis, when, to my surprise and satisfaction, I found the patient asleep, and, better still, that the hernial tumor had vanished without any manual interference whatever. There was nothing to be done except apply a truss, join in the joy of the patient and his friends, and bid them good-bye. It was evident that the relaxing influence of the draught had so removed the spasm at the neck of the hernial sac that the intestines had, as it were, flowed back, or, by their own vermicular motion, had been drawn back into the abdominal cavity.

Yours truly,

THOS. S. WALTON, M.D.

Parry Sound, Aug. 15, 1881.

MALTOPEPSYN.

To the Editor of the CANADA LANCET.

SIR,—Will you have the kindness to insert the following letter in the *Canada Lancet*, and oblige

Yours truly,

HAZEN MORSE.

Hazen Morse, Esq.:

DEAR SIR,—In reply to your letter of the 12th inst., asking our experience of the use of maltopepsyn in the Infants' Home, I beg to say, on my own account and for Dr. Pyne, whom I have spoken to on the subject, that much benefit has been derived from the employment of your preparation, wherever the use of agents required to promote digestion was indicated.

It has been found beneficial also in vomiting accompanying diarrhoea, among the infants of the Home, and is advantageously administered in certain forms of diarrhoea.

Yours truly,

J. H. BURNS, M.D.,

Consulting Physician Infants' Home.

Toronto, July 26, 1881.

Reports of Societies.

CANADA MEDICAL ASSOCIATION.

MINUTES AND PROCEEDINGS.

The Fourteenth Annual Meeting of the Canada Medical Association was held in Halifax, August 3rd and 4th, the President, Dr. Canniff, in the chair. About fifty members were present. The Hon. Dr. Parker, of Halifax, presented the report of the Committee of Arrangements.

Dr. Strong, Superintendent of the Cleveland Lunatic Asylum, and the Military and Naval Surgeons of Halifax were elected members by invitation.

Dr. Strong, and the Ex-Presidents present were requested to take seats by the President.

Drs. MacDonald, Slayter, Harrington, Lanigan, Townshend, and Fitch were elected permanent members. The Secretary read a communication from the Sandy Cove Sea-bathing Company, offering the use of their baths to members of the Association and their families. It was decided on motion of Dr. Botsford, that the delivery of the President's address should be the first order of business at the afternoon session.

Dr. Reid, of Mount Hope Asylum, Halifax, the Chairman of the Committee on Practice of Medicine, then read his report, in which he discussed General Paresis. It was decided to have the discussion of the report immediately after the President's address.

Dr. Stewart, of Brucefield, read the Report of the Committee on Therapeutics. The discussion to take place after that of Dr. Reid's.

Dr. Oldright, of Toronto, gave a short verbal report from the Committee on Climatology and Epidemic Diseases.

The President read the Report of the Committee on Vital Statistics. It was decided to discuss the report at a future time.

On motion of Dr. Botsford, seconded by Dr. Hingston, the following were appointed the Nominating Committee, Drs. Robillard Ross, and Fenwick, of Montreal; Eccles, of London; Clark, and Wright, of Toronto; Lawson, and J. F. Black, of Halifax; Steeves, of St. John; and Atherton, of Fredericton.

Dr. Hill, of Ottawa, read for Dr. Grant a short paper, giving a description of a new and simple kind of stomach pump. Dr. Oldright described a simple stomach pump, worked on the principle of the syphon.

The Association adjourned at 1 p.m.

AFTERNOON SESSION.

The President, Dr. Canniff, read his address on "Medical Ethics," which will be found in another column.

On the conclusion of the address the discussion of Dr. A. P. Reid's paper was taken up.

Dr. Clark, of Toronto Lunatic Asylum, speaking of Paresis, recommended that the general profession should make fuller study of that ailment, with a view to its treatment before it becomes incurable, which it generally is when it comes under treatment in lunatic asylums. He claimed that it was a disease with symptoms which could be detected long before it becomes incurable.

Drs. Jennings, of Halifax; Oldright, of Toronto; Botsford, of St. John; Morse, of Amherst, and others continued the discussion, and Dr. Reid summed it up as tending to show that if Paresis could be diagnosed in its early stage, and the patient placed under the treatment of a specialist, it was not incurable.

Dr. Stewart's paper on Therapeutics was next considered.

Dr. Jennings opened the discussion, speaking of the treatment of diphtheria, claiming to have discovered the advantages of brandy in its treatment, though some one in New York claimed the discovery.

Dr. Hill addressed the meeting on the use of chloroform, claiming that it was the best anæsthetic, and advised the administration of brandy before inhalation.

Dr. Coleman had used ether and chloroform and from his experience considered the former far safer. The Americans showed the English that ether was safer, and it had been substituted for chloroform in London hospitals.

Dr. Hingston, of Montreal, was strongly opposed to using chloroform and ether mixed. He showed the absolute necessity of having some one to watch the administration of the anæsthetic entirely. He thought more were allowed to die under chloroform than there should be. Artificial respiration was one of the best means of restoration, but was not called for in many cases, because the trouble was not with the lungs, but with the heart. In one instance he had reversed the patient, holding her feet up and head down, allowing the blood to run to the head. He considered ether safer than chloroform. Bromide of ethyl was useful where a short operation was to be performed, as it quickly brought insensibility, and consciousness returned as soon as the anæsthetic was withdrawn; but it was dangerous where a long operation was to be performed. Bi-chloride of methyl was useful where vomiting was to be avoided.

Dr. Jennings found, in performing long operations, it was best to use chloroform till insensibility was obtained, and then to use ether.

Dr. Morse, of Amherst, attributed fatalities to long-kept or badly-made chloroform.

Dr. Atherton said, in London many deaths, he believed, had resulted from too complicated apparatus, and fear of the persons administering, causing

them to lose their self-possession. In Edinburgh there was none of the latter, and less death, though the chloroform appeared to be administered even carelessly. In treatment he seldom watched the pulse, believing the first danger was indicated by cessation of respiration. He described a case in point which Dr. Allen had asked for.

Dr. Stewart regarded failure to watch the pulse as dangerous, as very frequently the heart was most seriously affected.

Dr. Atherton said it might be well to watch respiration and the pulse too, but cessation of the former was the first dangerous symptom, and the attention should be concentrated on respiration.

Dr. Oldright, of Toronto, read a paper describing a simple syphon apparatus for drawing fluid from the chest, with a practical illustration and very full explanations of the use of the apparatus, and cited cases in which he found it successful.

Dr. Allen said it was difficult to prevent the admission of air while extracting fluids from the chest, and he advocated the use of the aspirator. He found, however, that cases in which air was admitted got on just as well as where the stringent means to prevent its admission were taken.

Dr. Jennings thought a counter opening should be made through which carbolized fluid might be passed, as in the treatment of other abscesses.

Dr. Atherton advocated the use of carbolized air instead of washing out. The latter system has resulted in sudden death in some cases, and it was a question whether Dr. Oldright's system prevented this danger.

Dr. Farrell doubted whether Dr. Oldright's method would ensure exclusion of air. He had adopted a somewhat similar plan, by the use of a rubber tube, in a case he recently attended, but found the tube became occluded, and thought this difficulty would arise in using Dr. Oldright's apparatus.

Dr. Ross, of Montreal, approved of opening the chest on the antiseptic principle, but thought a large opening was preferable. He had seen cases of poisoning from the use of carbolic acid water.

The meeting adjourned at 6 p.m.

EVENING SESSION.

Dr. Bessey, of Montreal, read a very instructive paper on "Vaccine" contending for the superiority of kine vaccine. He makes a specialty of preparing kine vaccine in Montreal, keeping stock selected from the most healthy animals, and preparing the vaccine for use in the Dominion. After the paper was read a discussion ensued, and the reader answered many questions, the discussion lasting an hour. It was decided in future to confine the discussion to ten minutes on each paper.

Dr. Worthington, of Clinton, read a paper on "Scarlatina Maligna," showing his experience in many cases and the success of cold water treatment.

After a short discussion on this paper, Dr. Fenwick read a paper on "Ovariectomy," citing many cases which came under his notice during forty years' practice.

Dr. Hill, and Dr. Somers discussed Dr. Fenwick's paper.

Dr. Hingston also read a paper on "Ovariectomy," which provoked a discussion, taken part in by Drs. Slayter, J. F. Black, and others, Dr. Hingston replying.

He dwelt briefly upon the history of the operation in Canada, and gave some reasons why it had not been as successful in Canada as in Great Britain, one chief reason being that the operation had been performed with a view rather to speed than thoroughness. He alluded to cure by other than surgical means, and admitted that spontaneous cure sometimes occurred. He deprecated too early operation while yet no discomfort is felt, and before the parietes of the abdomen had undergone the process of thinning from pressure of the tumor. He gave particulars of his last fifteen operations, dwelling chiefly on the causes of death in the unsuccessful ones. With regard to adhesions he regarded those in connection with the omentum as the most formidable owing to proneness to hemorrhage, next those of the liver and spleen; parietal adhesions were of small moment. He was averse to the use of the clamp, and spoke of the unreliability of the thermo-cautery as a hemostatic.

The Association adjourned at 11.10 p.m.

SECOND DAY.

The Association met at 9 a.m.

The Treasurer's report was submitted, and Drs. Hill, and Atherton were appointed auditors to examine and report upon it.

Dr. Slayter exhibited an ingeniously contrived, self-retaining speculum, which enables the surgeon in certain cases to dispense with the services of an assistant.

Dr. Macdonald read his paper on "Water Analysis." He showed chemicals and apparatus by which the purity or impurity of water can be detected. This paper will be published in a future number of the LANCET.

In the discussion which followed, Dr. Coleman, Hill, and Oldright, took part.

Dr. Wright exhibited, for Dr. Grant, of Ottawa, a number of spruce shaving splints, which he found very convenient and useful in the treatment of fractures.

Dr. Stewart, of Brucefield, read a paper on "Treatment of Exophthalmic Goitre by ergot," and, at its conclusion, replied to questions by Drs. Steeves and Coleman.

Dr. Coleman read a paper on "The use of the Ophthalmoscope in the Diagnosis of Brain Disease." He cited several cases and their mode of treatment, and his success in such treatment.

Dr. Jennings read a report of some cases in practice, showing the effect on the temperature of a patient on a water bed by using hot or cold water; also some cases showing the effect of constant irrigation with carbolized water as compared with the ordinary Listerian spray and gauze. At the same time he exhibited an instrument used in the process of irrigation, which was worked on the syphon principle.

Dr. Slayter gave notice of a resolution pledging the Association to do all in its power to check the growth of specialism and specialists in medicine.

In supporting his resolution, Dr. Slayter said, the evil complained of was ruining the profession in America, and must be stopped if they ever expected to come up to the European standard.

Dr. Farrell suggested that the societies in the Maritime Provinces should be consolidated into a branch of the Dominion Association, and moved that a committee be appointed to consider the matter and confer with the various provincial medical societies for the purpose of bringing about a plan of organization of the medical societies in the Dominion in connection with the Dominion Medical Association. Drs. Clark, Canniff, Hill, Fenwick, Hingston, Steeves, Atherton, J. F. Black, Farrell, and the Secretary, were appointed such committee.

Dr. Fenwick moved, notice having been given last year by Dr. Howard, that the by-law relating to fees be amended, so as to read thus: "That every member shall pay two dollars for every meeting he shall attend." Carried.

Dr. Page made a short speech on sanitary legislation, and moved that Drs. Canniff, Oldright, Grant, Hill, Brouse, Osler, Fenwick, Laroque, Botsford, Atherton, Parker, and J. W. Macdonald, be a committee to seek from the Dominion Government improved legislation in respect to sanitation, and vital statistics, and to insist upon the organization of the profession as a condition of political support at the next election. Carried.

On motion of Dr. J. F. Black, seconded by Dr. Slayter, the Committee on Public Health was instructed to hold a conference with the committee on the same subject of the Nova Scotia Medical Society.

It was decided to defray the travelling expenses of the Secretary and Treasurer from the funds of the Association.

The President of the Association having announced that Dr. A. H. David had withdrawn from the office of General Secretary of the Association, a resolution was passed expressive of the Association's deep regret that any cause should prevent him from continuing his services, and more especially that this cause should depend upon personal indisposition. The success of the Association had heretofore largely arisen from the steady and persevering efforts of Dr. David, and this As-

sociation trusted that he might for many years witness the continued success of an institution to which he had been so devoted.

The auditors, Drs. Hill and Atherton, reported having carefully examined the Treasurer's accounts, and found them correct. They show \$138.35 received since last September, and \$133.66 expended, leaving a balance on hand of \$4.69.

Dr. Oldright gave notice, that at the next meeting he would move that clause 10 of by-laws should be amended by substituting the words, "Public health, vital statistics, and climatology," for the words, "Climatology and epidemic diseases."

The following officers were elected for the ensuing year:—President, Dr. Fenwick, of Montreal; General Secretary, Dr. Osler, Montreal; Treasurer, Dr. E. Robillard, Montreal; Vice-President for Ontario, Dr. Clark, of Toronto; Local Secretary for Ontario, Dr. A. H. Wright, Toronto; Vice-President for Quebec, Dr. F. W. Campbell, Montreal; Local Secretary for Quebec, Dr. Belleau, of Quebec; Vice-President for Nova Scotia, Dr. R. S. Black, Halifax; Local Secretary for Nova Scotia, Dr. C. D. Rigby, Halifax; Vice-President of New Brunswick, Dr. P. R. Inches, St. John; Local Secretary for New Brunswick, Dr. C. Holden, St. John.

Committee on Arrangements.—Drs. D. Clark, Oldright, Temple, A. A. McDonald, of Toronto, with power to add to their number.

Committee on Necrology.—Drs. Fulton, of Toronto; Atherton, of Fredericton; Lachapelle, of Montreal.

Committee on Education.—Drs. Eccles, London; Holmes, Chatham; and Bessey, Montreal.

Committee on Climatology and Public Health.—Drs. Botsford, St. John; Worthington, Clinton, Ont.; Larocque, Montreal; MacDonald, Londonderry, and Coleman, St. John.

Committee on Ethics.—Drs. Canniff, Toronto; Malloch, Hamilton; Gardner, Montreal; Marsden, Quebec; Bayard, St. John; Parker and W. J. Almon, Halifax; Steeves, St. John; Beaudry, Montreal, and Charles Moore, Sen., London.

Committee on Publication.—Drs. Ross, Montreal; Cameron and Fulton, Toronto; the General Secretary and Treasurer.

Committee on Practice of Medicine.—Drs. Lawson, Halifax; Graham, of Toronto; Duncan, of Bathurst.

Committee on Surgery.—Drs. Sheppard, of Montreal; J. F. Black, of Halifax, and McFarlane, of Toronto.

Committee on Obstetrics.—Drs. Temple, of Toronto; Trudel, of Montreal, and McLaren, St. John.

Committee on Therapeutics.—Drs. Tye, of Thamesville; Wilkins, of Montreal, and Somers, of Halifax.

Votes of thanks were passed to the President for his able conduct in the chair, and interesting address; to the Railway and Steamboat Companies; the Local Government for the use of the Council Chamber; the Sandy Cove Bathing Company; the local medical men; and to the Acting Secretary, Dr. Wright.

The Association then adjourned, to meet in Toronto on the first Wednesday in September of next year. After adjournment the members, at the invitation of the Commissioners of Public Charities, visited Mount Hope Asylum for the Insane, where they had lunch, and afterwards an excursion on the harbour and North-west Arm.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in Exeter on July 5th, Dr. Sloan, of Blyth, President, in the chair. The following members were present:—Drs. Sloan, Holmes, Hyndman, Worthington, Williams, Irving, Graham, Gillies, Campbell, Hurlburt, and Stewart.

Dr. Hyndman exhibited the following cases:—

I. A case of extensive necrosis of the femur in a lad aged 14.

II. A case of necrosis of the humerus with ankylosis of the right elbow joint, and osseous union of the heads of the ulna and radius in a boy aged 15.

III. A case of probable disease of the upper cervical vertebræ in a child aged two years.

IV. A case of long-standing contraction and induration of the left lung in a girl, aged fifteen years.

V. A large nævoid tumor affecting the cheek of a child aged two years.

Dr. Irving, of Kirkton, showed a very well-marked example of infiltrating carcinoma of the right breast in a woman, aged 45. The malignant disease in this case followed closely on the formation of an abscess in the breast, and it was some time before the diagnosis of carcinoma could be confirmed on account of this history.

Dr. Sloan exhibited a young man whose pleural cavity he opened recently for the treatment of an empyæma. The operation was performed with antiseptic precautions. When he first came under Dr. Sloan's care he had been ill for several weeks, and had spat up large quantities of pus which was due (according to his previous medical attendant in Michigan), to the pus in the pleural cavity finding its way into the lung texture. He soon ceased to expectorate pus, and when first seen by Dr. Sloan there was physical evidence of the presence of a large quantity of fluid in the right pleural cavity. The temp. varied from 102° to 103° F., the pulse was constantly elevated, and the respiration quickened. The introduction of an aspirator

needle confirmed what was suspected, an empyæma. Under the spray Dr. Sloan made a free incision into the pleural cavity, and gave exit to about a pint of sweet-smelling pus. Only three dressings were required. The man in a few weeks increased 40 lbs. in weight, and is at present in excellent health.

Drs. Stewart and Hurlburt showed the following cases:—

I. A female child, aged 19 months, who has lost in a great measure the motor power of all extremities. There is also loss of power in the neck and trunk muscles. The little patient is unable to stand even with assistance. With assistance it can sit, but not otherwise. There is marked tremor in all muscles brought into action. This tremor is absent when the muscles are at rest. There is also marked loss of muscular sense in the upper extremities. The disease is now of four months standing, and made its appearance slowly. There has been no elevation of temperature. The little patient has actually gained in flesh during the last two months. There are fits of explosive and causeless crying.

The child had been in good health and was able to walk before the present trouble began.

II. A man, aged 37, who has stenosis of the tricuspid orifice and disease of the left heart also. When first seen, six weeks ago, he wished to get relief from a severe headache, which was constantly troubling him. This headache was much more severe when he lay down, so much so was this the case that he had to pass many nights sitting on a chair. He has never been what is commonly called a strong man. He, however, never felt or showed any symptoms of his present trouble until about six or seven years ago.

Present state.—There is distinct bulging of the cardiac region, and a presystolic thrill is felt when the hand is laid over these parts. The transverse cardiac dulness reaches (on a line with 4th rib) from $\frac{3}{4}$ of an inch from right border of sternum to 4 inches from its left border, a distance of $6\frac{1}{4}$ inches. The vertical dulness extends from the upper border of the 4th rib downwards. A presystolic murmur having its maximum intensity over the sternum at the level of the 4th costal cartilage and a systolic murmur, louder, over the mitral area are heard. The heart's apex is between the 5th and 6th ribs, and on the nipple line. There is great fullness of the veins of the head, face and extremities. There is distinct jugular pulsation. There is great fullness of the veins of the fundus oculi, and the discs are both good examples of "choked discs." There is, however, no loss of sight. The pupils are firmly contracted and resist the mydriatic action of atropine to a considerable extent. The atropine quickly paralyzes the accommodation. There is no oedema of the extremities, and the urine although scanty

is free from albumen. The pulse is generally about 60, and regular. Tracings taken from the radial and jugular were shown. For the last three weeks he has been taking full doses of calabar bean, with the object of relieving the over-filled veins, and headache caused thereby. It was, however, found not to act so beneficially as digitalis, which was previously prescribed.

III. A case of Splenic Leucocythæmia. The patient, a man aged 47, had intermittent fever for nine months, 16 years ago, in Tennessee. Three years ago he felt weak, and had palpitation of the heart. It was only 10 months ago that he first noticed "a lump" in his left side. It rapidly increased in size until six weeks ago, since which time it has diminished somewhat. During the months of April and May of the present year he had daily attacks of chills, fever and sweating. When first seen (June 1st, 1881), his temp. was constantly elevated (100° to 101°)

Present state.—The spleen extends from the 6th rib to within two inches of the ilium in the mammillary line, a distance of $7\frac{1}{2}$ inches. In the transverse direction from one inch to the right of the umbilicus to within four inches of the spinal column, a distance of $11\frac{1}{2}$ inches. There is no abdominal pain or tenderness. The liver extends two finger breadths below the ribs. There is no enlargement of any of the lymphatic glands, nor is there tenderness over any of the bones. Blood: 2,500,000 red, and 147,000 white cells in a c.m.m., being a proportion of 1 to 17. The amount of hæmoglobin was not estimated. The red cells vary in size considerably, as also do the white. Many of the latter are very granular, and a good deal of free granular matter is to be seen. He sleeps well. The appetite is good, and the bowels are regular. Only on one occasion has he had epistaxis. There is a considerable amount of oedema of the lower extremities. About six weeks ago he commenced taking quinine and arsenic. There is no elevation of temp. now, and he has gained 10 lbs. in weight. The spleen has diminished slightly in size, but there is no improvement in the state of the blood.

Drs. Stewart and Hurlburt showed also the following microscopical sections:—

(1.) Spleen and liver from a case of leucocythæmia.

(2.) Spleen of intermittent fever.

(3.) Melanæmia of the brain.

(4.) Simple hyperæmia of the brain.

(5.) Tuberculosis of the pericardium.

CO. GLENGARRY MEDICAL ASSOCIATION.

The Glengarry County Medical Association held its quarterly meeting in Alexandria, on the 7th of June, 1881. The Chairman having taken the chair, the minutes of the last meeting were read

and adopted. Letters from Drs. Hunt, Harkness and Falkner, expressing sympathy with the Society, and regretting inability to attend, were read by the Secretary. Drs. McDermid, McDiarmid, Chisholm, and McMillan, were appointed to read papers on medical items at the next meeting of the Association.

Moved by Dr. Chisholm, and seconded by Dr. McDiarmid, that the Secretary be instructed to communicate with the licensed practitioners of the County of Prescott, with a view to co operate and unite with this Association. Carried.

The following gentlemen then read papers on the subjects following their names, viz.:—Dr. Chisholm, on "Medical Ethics," Dr. McDiarmid, on "Pelvic Cellulitis," Dr. McDermid, on "Typhoid Pneumonia," and Dr. McMillan, on "Pyæmia," all of which being short, pithy, and to the point, elicited a lively and animated discussion. Dr. McDonell then read the notes of an interesting case of "Erysipelas of the Knee," occurring during the eighth month of pregnancy, inducing premature labour, with recovery of both mother and child. The meeting then adjourned, to reassemble on the first Tuesday in September.

QUINTE AND CATARAQUI MEDICAL ASSOCIATION.—A meeting of the medical profession of the "Quinte and Cataraqui Division" met in Picton on the 12th ult., by appointment of Dr. H. W. Day, the territorial representative, for the purpose of establishing a Medical Association for said Division. Resolutions regarding the organization of the Association were adopted in accordance with the provisions of the "Ontario Medical Act." Officers for the remainder of the year were elected as follows:—President, Dr. H. W. Day; Vice-presidents, Drs. Platt, Burdett, Metcalf, and Beeman; Local Secretary for Quinte, Dr. Farley; Local Secretary for Cataraqui, Dr. Henderson; General Secretary and Treasurer for the Association, Dr. A. C. Bowerman, Bloomfield.

NEW BRUNSWICK MEDICAL SOCIETY.—The above Medical Society was inaugurated in Fredericton on the 19th of July. About 35 members were present, a large number being from St. John. A constitution and by-laws were adopted, after which the following officers were chosen for the ensuing year:—President, Dr. Steeves, St. John; Vice do., Dr. Earle; Secretary, Dr. Duncan, Bathurst; Corresponding Secretary, Dr. Patterson; Treasurer, Dr. Berryman. The Society elected the following gentlemen to serve as members of the Medical Council of New Brunswick: Drs. McLaren, Hamilton, Travers, Atherton, and Vail. The next annual meeting of the Society will be held in St. John on the third Tuesday in July, 1882.

Selected Articles.

CASES IN HOSPITAL PRACTICE.

CLINIC BY AUSTIN FLINT, M.D., NEW YORK.

Hemorrhagic Diathesis.

The case of anæmia from hemorrhage, which I showed you at a former meeting, is not progressing as favorably as we would desire. He had a tooth extracted, and the bleeding from the socket continued for some time before it could be arrested. After that he had hemorrhage from the nose, and yesterday the anterior and posterior nares were plugged. The plugs were removed this morning, but the hemorrhage returned again, and the nose had to be replugged. It is a good case illustrative of the hemorrhagic diathesis, which we hoped in this instance was acquired. But the patient now informs us that his brothers also have the same tendency to bleeding, so that it appears to be hereditary. I will not stop now to discuss the causation of the hemorrhagic diathesis, or to speak of the hereditary, the congenital, or the acquired forms, but would recommend you to read up what has been written upon the subject. I am sorry to say, however, that you will not be able to find an altogether satisfactory explanation of the pathological condition. It was supposed at one time to be dependent upon a deficiency of the fibrinous constituents of the blood, but that has been disproved, and it is the prevailing impression now that it is due to some state of the terminal branches of the arterial system, rather than to the condition of the blood itself.

Bright's Disease.

The patient before you, gentlemen, is a substitute for one whom I had intended to present to you, but cannot, for the best of all reasons, viz., he is not in life to-day. It was a case of a complication of ailments, one of which was an affection of the kidney. He had a thickened pleura, and some solidification of lung on one side. The object which I had in view in selecting that case was, to illustrate the way in which we are liable, without due care, to be deceived respecting the presence of liquid in the pleural cavity. That patient had marked flatness on percussion at the base of the chest, and there was also absence of the respiratory murmur, and from these two signs the natural inference at first would be, that there was liquid. There was none, however, as was shown by the introduction of the hypodermic syringe. I meant to have shown the case as illustrative of the importance of vocal resonance in preventing error of diagnosis; vocal resonance continued down to the very base of the chest, which was conclusive evidence that there was lung there, irrespective of the

demonstration by the hypodermic syringe. In the absence of that patient the doctor has brought up this patient, whom I have not seen before, and to whose case we will devote only a short time. I will read from the recorded history :

Samuel —, sixty years of age, a native of Ireland, a tailor, admitted on the 10th of this month ; nothing important pertaining to his family history. His personal history is as follows:—He has always been accustomed to the use of alcoholic beverages, sometimes taking them in considerable quantities. He had been drinking a large amount of beer for two or three days before his present illness, which commenced three weeks ago. The first thing he noticed was œdema of the scrotum and of the penis ; then the legs and feet began to swell, and he became puffy about the eyes ; he had considerable pain in the head, misty vision, spots before his eyes, and vertigo, also a feeling of great oppression at the stomach, with nausea, pain in the loins. He noticed that he passed less water than usual, that it was very dark, and had pain in the end of the penis during its passage. On admission, the lower extremities were œdematous, likewise the scrotum and the eyelids. He complained of pain in the back, of loss of appetite, and a general feeling of malaise. Physical examination of the chest showed the lungs to be normal, the urine was amber colored, cloudy, of a specific gravity of 1.010, acid, and contained about ten per cent. of albumen, the whole quantity being 21 ounces. He was put upon the bitartrate of potash, and upon the infusion of dog-grass, or triticum repens, as a diuretic. On the 11th he passed 24 ounces of urine, and on the 12th, 48 ounces, so that the dog-grass seemed to have had some diuretic effect.

Such, gentlemen, is the history, and the first question which arises is : Is this an acute diffuse nephritis, or is it some one of the several chronic forms of renal disease ? That is a question which often presents itself to us, both in private and hospital practice. The patient, as in this case, notices first œdema of the limbs, then œdema of the face, increasing more or less, and with that, loss of appetite, impairment of strength, some pain in the back, general debility, the urine scanty, dark colored, smoky, and even black in some instances, the specific gravity usually high. Now, with the exception of the last fact, what I have just stated is a synopsis of the history of this case, and that group of symptoms points to acute diffuse nephritis ; and if we are quite sure of that, and that there was no anterior affection of the kidney, we may always entertain a favorable prognosis, we may expect the patient to recover. There are some exceptions to that rule, but we have a right to expect recovery. We have also a right to expect that the acute will not be followed by a chronic form of the disease ; but there are exceptions to this rule also. We did not see the urine when it

was dark, as this patient describes it, for it loses this dark color after a while, and this patient had been sick three weeks before he entered the hospital. This dark color, by the way, is due to the presence of hæmatine, and sometimes the urine presents very distinctly a bloody appearance.

In concluding that we have a right to infer that this patient has had an attack of diffuse nephritis, an important question beyond that is, did this attack of acute nephritis occur when the kidneys were healthy, or was it superadded to a chronic affection ? This latter fact obtains not infrequently. There are two points in this case which have a bearing on that, and these two facts are opposed to each other. The low specific gravity, with the small quantity of urine which the patient made when he entered the hospital, are not very consistent with simple acute nephritic disease, and yet it would be wrong to base a positive judgment upon an isolated fact like that. So far as that goes it would rather tend to show that there was an old affection prior to the development of this acute affection. The other point is this, that the lungs are normal. If this patient had a chronic form prior to this acute affection, it probably was a fibroid or contracted kidney, which leads after a time to enlargement of the heart, without, of course, valvular lesion. If, then, we were to find in this case hypertrophy of the left ventricle, it would be a very strong point as regards the prior existence of a chronic renal disease ; and the fact that the left ventricle is not enlarged does not bear as strongly against chronic renal disease, although it has a certain amount of weight on that side. On examining his heart I cannot detect anything abnormal, so that we are justified in considering it probable that this is an instance of acute diffuse nephritis, which is progressing favorably under the use of simple diuretics, and if this view be correct we may look forward in a week to much more improvement in the patient's condition, expecting that the urine will increase in quantity up to the normal, be increased in specific gravity, that the albumen will be diminished, that the little dropsy which he now has will have disappeared, and that he will be improved in all respects.

Heart Disease.

It occurs to me, gentlemen, to mention some circumstances which relate to the diagnosis of functional disorder of the heart. I received a letter yesterday from a medical man who lives at a considerable distance, who is very anxious on the subject of disease of the heart ; he said in his letter that he was about fifty years of age, and he had during nearly half that period been actively engaged in the practice of medicine ; for ten years or longer he had suffered at times from an affection of the heart which rendered him very anxious ; and for a long time he had been intending to come

and have me examine his heart, but something prevented. Within the past few weeks the disturbance of the heart was very great. He wanted to know if it was possible for me to come and see him. I relate this circumstance with a view of impressing upon you two or three points. I have scarcely any doubt that that man is suffering from a purely functional affection of the heart. Why? Because he has had a disturbed action of heart, off and on, for a long time, and if that disturbed action were due to an organic lesion, matters would have developed in a very decided way before this. Then he does not mention that he has any dropsy; he only mentions disturbed action of the heart, and some disturbance of the respiration. He also mentions that he has been a sufferer from dyspeptic ailments during pretty much all his professional life. In my answer to-day, I told him he could settle the matter almost certainly himself, and in a very simple manner. If he found the apex beat in the fifth intercostal space, near the vertical nipple line, and the resonance on percussion equal, just without the nipple on the two sides of the chest, he might feel sure that his trouble was purely functional. Now, those are very simple points to ascertain. Anybody can ascertain where the apex beat of the heart is, and it is very easy to determine whether the resonance at the points indicated be equal. Now, why was I warranted in saying that? Because, if the resonance and the apex beat of the heart be found as stated, enlargement of the heart may at once be excluded; and if there be no enlargement of his heart, his trouble must be functional, even if we assume that there be valvular lesions, for valvular lesions do not lead to disturbance of any great amount until they have led to enlargement of the heart; and if, then, there were no enlargement of the heart, which would exclude any organic trouble, he would know that it was a functional disturbance, and need not worry. Thus I wrote him, and told him to try to relieve his dyspeptic ailments by tonic remedies, by taking good substantial diet, which is the proper treatment of dyspeptic ailments in general; to take a little wine, under scriptural injunctions, and for the reason given in scripture, and to get a little change of scene, without the annoyance incident to medical practice; and another very important thing, to put the heart as far as practicable out of his own mind, and never to feel of his pulse, or try to listen to his heart sound. I venture to say, that I shall get a reply by and by, saying that he is comfortable, easy.

Dysentery.

I shall detain you but a few minutes with our next patient. I am told that it is a case of dysentery, which is an important subject, being a common disease, and a good deal might be said about

it, but we have other cases which we want to present, and our time is limited.

Her name is Sarah —, thirty-two years of age, a native of Ireland, a domestic. Admitted on the 11th of this month, day before yesterday. She is a hard working woman, employed in a laundry, exposed to variations of heat and cold, and on the sixth of this month was taken with a severe pain in the stomach, followed by vomiting and passages of a diarrhoeal character. The diet had been simple, containing nothing to which the symptoms could be attributed. The colicky pains soon became more severe; she lost her appetite, and suffered from a general feeling of malaise. The next day the dejections were more numerous and mucous in character, and accompanied by tormina and tenesmus, those two classical symptoms which are diagnostic of dysentery. Then the dejections became muco-sanguineous, with almost constant desire to go to stool, although but a small amount was evacuated. You see the dysentery was preceded a day or so by diarrhoea, which is always the case, the diarrhoea lasting a variable length of time; then she had the characteristic stools, mucus and blood, or bloody mucus, accompanied by tormina, griping pains, and tenesmus, a sensation as if the rectum was full, giving rise to a strong desire to make effort at defecation—a sensation due, not necessarily to the presence of anything in the rectum, but to an inflamed condition of the mucous membrane.

She complained, on admission, of great prostration, of anorexia, of soreness and pain in the abdomen, together with the symptoms above described. The stools muco-sanguineous, sometimes almost pure blood. The temperature was 101° , the pulse 110.

This patient got half an ounce of whisky every two hours, and ten grains of the subnitrate of bismuth every three hours, and also tincture of opium, tincture of aconite, and the chalk mixture. During the night of the 12th she had five muco-sanguineous passages. She says she feels weak this morning. The above prescription was changed by increasing the opium at each dose, regulating the quantity by the effects upon the respiration. The respirations went down to seven a minute, when the medicine was stopped, and one ninety-sixth of a grain of atropia was given hypodermically, and gallic acid was given during the day. The next night the passages were diminished in number, being only three. The patient's appearance is better to-day.

I would simply direct your attention to the treatment in this case, saying that I believe it is the correct one; and would add that if, by manipulation of the abdomen and by the character of the stools, you can satisfy yourself that there is fecal matter in the intestines, they had better first be evacuated, after which, as I am well convinced,

the proper treatment for dysentery is the employment of opium in some form, carried up to a point of comfortable tolerance; and I introduce this case as illustrative of that method of treatment, and of its probable success. In a disease of this form, which involves no danger to life, the treatment is a mere question of relief and shortening the duration of the disease. I believe that by this method of treatment we can accomplish these ends; at the same time we are to bear in mind the fact, which was established in this hospital some years ago, that dysentery is a self-limited disease, running its own course, and ending in recovery, with some rare exceptions, its average duration being about eight or ten days; still, I believe that we not only mitigate, lessen the extent of the disease, but shorten its duration, by resorting to the use of opium.

FAURE'S STORAGE BATTERY AND SWAN'S ELECTRIC LIGHT IN SURGERY.

George Buchanan, Prof. of Clinical Surgery University of Glasgow, gives the following in the *Brit. Med. Journal*, of a recent date.

The recent invention of M. Faure has rendered electricity available for surgical use in a way it has not been before. It consists of a cylindrical vessel of lead, nine inches high and five inches in diameter, with a leaden bottom, but open at the top; into this is packed a kind of cushion of a material which has the power of absorbing electricity. To this vessel are attached the two poles of a working battery, and as long as the connection is maintained the vessel accumulates the electricity flowing into it. When charged it can be detached from its connection and kept for a long time, or carried from place to place. When required for use, the cushion, which should always be kept moist, is wetted with dilute sulphuric acid, and wires connecting are attaching to its poles, when it is converted into a powerful battery.

On June 3d I removed a nevus tumor from the tongue. The nevus was situated upon the anterior half of the right side of the tongue of a young gentleman eleven years of age. It had been in existence for many years, but latterly it had frequently been scratched and then bled freely. As the growth was very vascular and invaded the tongue almost to the middle line, I determined to remove it by the thermocautery. Having occasion to see Sir William Thomson the day before the operation he offered me the use of a Faure's battery, which had been sent from Paris only a few days before, and on which he was engaged in experimenting to test its value. He was so enamoured of its powers that he said, "It is a witch." And now it has the name of the "Electrical Witch" at the University.

In driving to my patient I called at Sir William's laboratory and got with me a battery which can easily be carried in one hand, and without the least difficulty. After having put the patient under chloroform, I attached its poles to a platinum wire ecraseur, and removed the tumor without a drop of blood.

This contrivance which enables one to carry stores of powerful electricity in a jar no bigger than an ordinary preserve-meat tin, will render the use of electricity much more extended than heretofore. Supplies of these cumulative jars are being sent from Paris, and can be charged by any kind of battery to which they are attached.

Swan's Light.—This light is specially useful in examining parts of the body or tumors, which we wish to test by transmitted light. I have under my care just now a man who is compelled to be in the recumbent posture, from a severe fracture of the thigh. He has also a tumor in the scrotum with all the characteristics of a hydrocele; but it was almost impossible to judge of its translucency in consequence of its being bound down to the groin, and being of very old growth was intersected by bands which made it more or less opaque. It was impossible, in the man's fixed position, to get a candle or lamp placed so as to judge of its translucency. At the same time as Sir William Thomson offered me the battery before alluded to he suggested that Swan's light might be used for surgical investigations. He kindly provided me with a very powerful battery of the ordinary kind, sent his mechanical assistant to fit it up in my ward, and gave me a Swan's electric light lamp. This is a globe of glass about an inch and a half in diameter, containing a filament of carbon wire twisted into a loop, which when rendered incandescent by the battery, gives out a powerful light. This globe, which is held by a handle of glass tube about four inches long, can be placed in any position; and, as it is not heated beyond what can be easily borne by the skin, it can be placed in actual contact with the tumor in any place without danger of setting fire to the bedclothes. It proved most successful, for even in the ward of the hospital, where the bright sun could not be effectually shut out, the translucency of the hydrocele was made apparent to every student.

TREATMENT OF PNEUMONIA DURING THE FIRST STAGE.—Prof. Alfred L. Loomis, in *New York Med. Record*, says in regard to treatment: What measures shall we employ to overcome or mitigate the impression made upon the nervous system by the morbid agent which is operating to produce the pneumonia? The experience of the past eighteen months leads me to state with some positiveness that in opium we have such an agent. My rule for the past year has been to bring my

patient under the full influence of the drug at the onset of a pneumonia, and to hold him in a condition of comparative comfort until the pneumonic infiltration is completed (usually for the first four days of the disease). After this period, the greatest care must be exercised in its use, for now a new danger threatens—namely, paralysis of the bronchi, and consequent accumulation of secretion in the bronchial tubes—which will greatly increase the difficulties of respiration; but during the developing period of the disease, when the pneumonic blow is first struck, morphia hypodermically seems to lessen the nervous shock and to diminish or prevent the effect of the pneumonic poison on the nervous system, until the first violence of the poison has been spent in completing the pulmonary infiltration. The use of opium in this way does not interfere with the usual antipyretic treatment of the disease, nor does a demand for alcoholic stimulants contra-indicate its use. The results which have followed this plan of treatment in the limited number of cases in which I have been able to fairly test it (in patients that have been directly under my personal management) have convinced me that it greatly diminishes the chances of heart-failure, and cases which from their age and attending circumstances seemed hopeless have recovered. The great relief and comfort which the use of opium in this way gives to the pneumonic sufferer during the first four days of his struggles are sufficient to commend it, especially in those cases where an extensive pleuritic inflammation accompanies the pneumonic development.

REMOVAL OF THE KIDNEY FOR NEPHROLITHIASIS.—At the Charing-cross Hospital is a lad aged fifteen, from whom Mr. Barwell removed a kidney on May 5th, and who is now convalescent. The boy had been under observation for about a year with pyelitis and retro-peritoneal abscess. An incision was made about ten months ago, with the effect of mitigating the symptoms. The wound had healed, leaving only a sinus. In April, by sounding through this passage, Mr. Barwell detected a stone. Yet although the lad was becoming very anemic, with irregular hectic temperature, no consent for operation could be obtained until the above date, when lumbar nephrectomy was performed. Two peculiarities rendered the removal unusually difficult—viz. the dense thick cicatricial tissue and the proximity of the rib to the ileum. Mr. Barwell cut through the tissues, and came upon the kidney with the stone impacted. An endeavour to extract this latter caused copious bleeding, hence the operator rapidly enucleated the gland and passed a ligature round the pedicle *en masse*. Since want of room forbade removing the kidney entire, it was divided and extracted in two parts. The operation was thus completed very quickly, and with scarcely any loss of blood.

Since then the boy has been going on uninterruptedly well, his temperature becoming normal and regular, the wound being now nearly healed. This, we believe, the second successful case of removal of the kidney for stone.—*London Lancet*.

MEDICAL MISSION.—A "Medical Mission" was formally opened last month, at No. 5 East Broadway, New York, Dr. Agnew presiding, and Rev. Dr. Taylor delivering the inaugural address. The object of the mission, as stated in a published circular, is "to reach that numerous class of poor persons, always to be found in a large city, who are generally inaccessible to the Gospel, by giving them gratuitous medical relief, and at the same time preaching the Gospel to them, thus linking together in the missionary physician, efforts to heal the body and to save the soul." The first medical mission in the United States was established in Philadelphia, two years ago, and the second at Chicago, about a year since, in charge of Mr. D. L. Moody. Among the board of managers of the New York institution are Mr. Cornelius Vanderbilt, Mr. Benj. C. Wetmore, and Robt. Hoe, Jr.

FATAL RESULT FROM THE APPLICATION OF SAYRE'S JACKET.—The patient, a child, suffered from a considerable kyphosis at about the junction of the dorsal and cervical vertebrae. It was restless during the suspension; suddenly the breathing stopped. Immediate tracheotomy showed the trachea free down to its bifurcation, and consciousness could not be restored. The breathing was stertorous, and the child died one and a half hours after the suspension. The autopsy revealed a very marked angular curvature of the spine and a very large abscess reaching to the mediastinum.—*Proceedings of German Surg. Society; Deutsche Med. Wochenschrift; Maryland Med. Journal*.

LEMON JUICE IN DIPHTHERIA.—Dr. J. R. Page of Baltimore, in the *New York Medical Record*, May 7, 1881, invites the attention of the profession to the topical use of fresh lemon juice as a most efficient means for the removal of membrane from the throat, tonsils, etc., in diphtheria. In his hands (and he has heard several of his professional brethren say the same) it has proved by far the best agent he has yet tried for the purpose. He applies the juice of the lemon, by means of a camel's hair probang, to the affected parts, every two or three hours, and in eighteen cases on which he has used it the effect has been all he could wish.—*Med. and Surg. Report*.

CRUDE PETROLEUM IN PHTHISIS.—It is claimed that good results have been obtained by the use of crude petroleum in phthisis. It is given in four grain doses in pill or capsule.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

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* This Journal has the **LARGEST CIRCULATION** of any Medical Journal in Canada.

TORONTO, SEPTEMBER 1, 1881.

THE INTERNATIONAL MEDICAL CONGRESS.

The seventh meeting of the International Medical Congress, held in London on the 3rd of August and following days, was the event of the season, so far as medical affairs are concerned, and one of the landmarks in the history of medicine in the 19th century. Never before, in the history of the world, was there such a large gathering of representative medical men, nor such a galaxy of the lights of the medical profession, as were assembled together from all parts of the civilized world on that occasion. Every other meeting, and we were almost going to say everything else, dwarfed into insignificance in comparison. The very interesting meeting of Pharmacutists, from all parts of the world, held during the first three days of the week, was completely overshadowed by its gigantic congener, the International Medical Congress. Even the meeting of the British Medical Association, held subsequently at Ryde, in the Isle of Wight, and which is usually regarded as the great medical event in England, was for the moment almost entirely lost sight of, although reports that have reached us, just before going to press, would tend to show that it was on the whole a very successful gathering.

Upwards of three thousand two hundred persons registered their names as members of the Congress, one hundred and nineteen meetings of sections were held, and four hundred and sixty-four written and three hundred and sixty spoken communications were made. The business of the meeting,

such as the reading and discussion of papers, was carried on in one of three languages—English, French or German—at the option of the individual. The meeting, which was under the patronage of the Queen, was honored by the presence of His Royal Highness the Prince of Wales and the Crown Prince of Germany, the former of whom made a most appropriate speech, in which he recognized the important part which medicine plays in the life of a nation. The opening address was delivered by Sir James Paget, who amply maintained his high reputation for eloquence,—his speech being remarkable both as a scientific production and an oratorical feat. Of all the addresses delivered before the Congress, that in favor of vivisection, by Prof. Virchow, attracted most attention. The distinguished German's appearance on the platform, together with Paget, Jenner, Charcot, Langenbeck, Pasteur, Volkmann, Esmarch, Kuester, Pantaleone, Pancoast, Flint, and others of equal eminence, called forth a perfect ovation.

The addresses which were delivered in the General Sessions were, almost without exception, of the highest order of merit, and medals of honor were presented to each of the orators as a suitable tribute to the value of the services rendered. The work carried on in the sections was of the greatest interest, and, on the whole, of a practical character, especially in the sections on Surgery and Obstetrics. All the leading sections—Medicine, Surgery, Obstetrics and Pathology—were largely attended, and much interesting and profitable work was accomplished. Some degree of confusion and want of appreciation was occasioned by the difference of language that prevailed among the speakers—first one in English, another in French, a third in German, and so on; but, on the whole, though somewhat bewildering at times, matters worked with comparative smoothness.

The entertainments were on a scale of magnificence that could scarcely be surpassed. On the evening of the first day (Wednesday) a brilliant *soirée* was given at South Kensington, which was honored by the presence of the Prince of Wales and Crown Prince of Germany. On Thursday evening a banquet was given by the Lord Mayor to 300 representative members of the Congress at the Mansion House, the majority of the guests being distinguished foreign surgeons and physicians. The toast of "Our Foreign Visitors and Guests"

was coupled with the names of Professor Von Langenbeck for Germany, Professor Trelat for France, Dr. Pantaleone for Italy, and Dr. Austin Flint for the United States. On Friday the Lord Mayor and Corporation gave a grand reception at Guildhall. On Saturday a large number of garden parties and private receptions took place, and on Sunday many of the museums and picture galleries were thrown open to members of the Congress. On Monday a visit was made by a party of the members to the telegraph works at Woolwich, and the steamship *Faraday*; another party visited the docks in the morning, and in the afternoon attended the garden party given by the Baroness Burdett-Coutts at her residence at Highgate. In the evening a *conversazione* was given in the museum of the Royal College of Surgeons. One of the most pleasant excursions was that to Folkstone to witness the unveiling of the statue of Harvey by Prof. Owen, C.B.

Considerable dissatisfaction was caused in some quarters by the decision of the Congress not to admit lady doctors as members, and a vigorous protest was entered by a large number of properly qualified lady practitioners, but no attention was paid to it. The remarkable success of this great meeting (and there can be only one opinion as to its success), was due, in a great measure, to the able management of Sir James Paget, and the enthusiastic and herculean labors of the indefatigable Secretary-General, Mr. McCormac. Many and varied are the details necessary to be attended to in order to bring together so many scientific and practical physicians and surgeons from all parts of the world, and provide both for their entertainment and instruction. The successful manner in which this was accomplished showed that neither energy nor skill was wanting in those who had in charge the arrangement of the programme. The meeting could not fail to be of immense benefit to those who were fortunate enough to be present. The attrition of mind with mind, the quickening of the intelligence, the suggestion of new lines of thought, the increase of practical experience, and the convergence and interchange of ideas, are among some of the grand results which may be expected to flow from such a gathering as this. It may also prove a useful remedy against that hindrance to scientific progress, and professional advancement so prevalent in our midst, that canker-worm—self-sufficiency.

THE CANADA MEDICAL ASSOCIATION.

The fourteenth annual meeting of the Canada Medical Association was held in Halifax, commencing on the third of August, under the presidency of Dr. Canniff. The attendance was not as large as usual, but the meeting was, nevertheless, a very interesting and profitable one. The address of the President on the old subject of "Professional Ethics," (though we fear new to many members of our profession), was most opportune, for at no time in the history of the profession in Canada has there been greater need of iteration and advice on this important topic than at present. It would almost seem as if some of our medical brethren were either entirely ignorant of the provisions of the Code of Ethics, or had said good-bye to all such time-honored counsels, in their mad haste for professional fame, or worldwide notoriety. Our only regret is that the worthy President had not as audience those members who most required the lessons so eloquently expressed. We trust, however, that some of those absent ones may read it in the columns of the *Lancet*, and take counsel of it in their conduct towards their brethren.

Many of the papers read, both medical and surgical, were of more than ordinary merit, and elicited considerable discussion in which many of the members took an active part. The general interest in the meeting was much enhanced by the fact that the papers were read in the same hall, there being no divisions into sections as is usually done.

Sanitary matters as usual came in for a full share of attention, and the committee reported that very vigorous efforts were made during the course of the last session of the Dominion Parliament to prevail upon the Government to create a bureau of health and vital statistics. On two occasions the committee by appointment waited upon Sir Charles Tupper and Sir John Macdonald to urge the importance of sanitary matters and endeavour to secure a grant for the purpose of carrying out an effective system of health registration in accordance with the spirit of the resolution adopted by the Association. The committee was accompanied by almost all the members of the medical profession belonging to the Senate and House of Commons, as well as the profession of Ottawa.

As might be expected, Sir Charles Tupper expressed his desire to carry out the wishes of the Association. Sir John Macdonald expressed himself as strongly in favour of taking some decisive step in the near future to establish a bureau of vital statistics, and to create a department devoted to public hygiene. In fact, he gave the committee to understand that at the close of the session he would move in the matter, or, at least, as soon as the census taking was completed. Not only did members of Parliament manifest an interest in the matter, but the press throughout the Dominion very generally advocated prompt action. The members of the committee in their individual capacity lost no opportunity in urging the subject upon the Government and members of Parliament, and in their efforts they were warmly seconded by the medical gentlemen in the House.

The social side of the meeting was all that could be desired, and was in keeping with the well known hospitality of our brethren in the Maritime Provinces. The sail around the beautiful harbour of Halifax was most delightful, and much enjoyed by those who participated in it.

PROFESSIONAL ETHICS.

To read our local papers it would appear as if some members of the profession were strongly unmindful of what they owe to themselves and to their brethren at large. It is generally recognized by all really reputable practitioners that anything like a parade of cases and of treatment before the public is beneath the true dignity which should be maintained, and degrades those who indulge therein to a level with quackery. We have often been disgusted as we have read the different country journals at announcements that Mr. so-and-so scratched his finger, but, under the skilful treatment of Dr. —, he is rapidly recovering. We have charitably attributed many such notices to the officious zeal of some item-searcher, and would fain exonerate the professional gentleman from any share in the notice, knowing well that such a flaunting of name and "skill" would not meet with the approval of any really honorable member of our profession. One of the latest of these disgusting exhibitions occurred in connection with an accident which befel a little girl in the County of Victoria, Ont. She was kicked in the head by a

horse, causing severe fracture of the skull. Dr. A. was called in and gave her such treatment as he considered adapted to her case. Twenty hours afterwards Dr. B. was sent for and immediately took charge of the case. The patient rallied, and in a few days, an operation for the removal of the protusion of a portion of the brain was performed. "This successful and skilful operation" was published in a local paper, and was worded in such a way as to reflect discredit upon the skill of Dr. A., while it was most laudatory of the surgical treatment of Dr. B. who had rescued the child from certain death. Unfortunately, however, for this grand flourish of trumpets, the patient died. We have before us the whole of a somewhat unseemly correspondence that ensued, in which different practitioners participated. It affords another example of the many attempts at display, with some degree of success, before the minds of those altogether unable to judge of the real character of a course adopted, but which to such appears to be wonderfully in advance of all they had ever heard.

Some there are again, on the other hand, who are constantly parading themselves in the public newspapers, availing themselves of any pretext to write a letter to the press, with the view of bringing themselves into prominence, and keeping their names before the public. The name of an individual who resides not many miles east of Toronto occurs to us while we write. This gentleman, who is scarcely ever known to write an article, paragraph or letter to any of the medical journals, for the benefit of his *confreres*, is ever ready, on all conceivable topics, to air his views before the general public in the secular press.

We do hope that the progressing intelligence of the community will soon mark its appreciation of such lines of procedure, but until it does there will, we fear, be those found who having even a degree and a license, will stoop, however low, in the vain hope of obtaining public favor.

To vaccinate or not, that is the question ;
 Whether 'tis better for man to suffer
 The painful pangs and lasting scars of small-pox,
 Or to bare arms before the surgeon's lancet,
 And, by being vaccinated, end them. Yes !
 To feel the tiny point and say we end
 The chance of many a thousand awful scars
 That flesh is heir to,—'tis a consummation
 Devoutly to be wished.—Ah ! soft you now,
 The vaccinator ! Sir, upon thy rounds
 Be my poor arm remembered ! *Punch.*

HON. DR. WM. H. BROUSE.

It is with the most profound regret that we this month announce the death of the Hon. Dr. Brouse, of Ottawa. In his death the medical profession and the country sustain an irreparable loss. He was a descendant of the U. E. Loyalists, and was born in the Co. of Dundas. He received his literary training in the University of Victoria College, from which he obtained the degree of M.A. in 1848. His professional education, however, was received partly in Victoria College and partly in McGill College, Montreal, in the latter of which he finally took his degree. He subsequently settled in Prescott, and commenced the practice of his profession, in which he was eminently successful, and soon acquired more than a local reputation. He continued his practice there until about a year ago, when he removed to Ottawa, where he had already secured an extensive and lucrative practice. In 1866 he was elected to represent the St. Lawrence and Eastern Division in the Ontario Medical Council, and continued as the representative from that date until the last election, when Dr. Bergin succeeded him, and he was chosen the representative of Victoria College. He also held the position of President of the Council from 1870 to '71. For many years past he was connected with the militia as surgeon to the 56th Volunteer Battalion. He was mayor of Prescott in 1866, the year of the Fenian raid into Canada. When the Fenian forces arrived at Ogdensburg with the intention of crossing the river, the mayor of that city telegraphed the mayor of Prescott, asking what he could do to assist the Canadian authorities. Dr. Brouse immediately sent the following laconic reply: "Let them come over, but don't let them go back."

Dr. Brouse first entered Parliament in 1872, as the representative of South Grenville. He was re-elected in 1874, and in 1878 was appointed a Senator. During his Parliamentary career he distinguished himself by securing a pension for the surviving heroes of 1812-15, and also by his laudable efforts to obtain some recognition of the faithful services of those who had acted a patriotic part in the rebellion of 1837. He took a warm interest in everything that was calculated to promote the welfare of the people morally or physically. Dur-

ing the last session of Parliament he delivered a most able and interesting speech in the Senate, on the question of Public Health and Sanitary Reform, showing by carefully compiled statistics the great saving of life that might be effected by wise legislation, and was highly complimented by leading members on the efforts he had put forth on this great question, and the favourable impression he had made on the House. He will be greatly missed in the Senate and among his many warm friends, for he was much respected and esteemed by all who knew him. He leaves a wife and two children to mourn his loss.

PRESIDENT GARFIELD.—The condition of President Garfield has been much improved in some respects during the past week, but it is still far from assuring. The stomach is doing its work with more energy, and the enemata have been discontinued again. His physicians are more hopeful, although there does not appear to our minds to be much solid ground to found hope upon. The suppuration of the parotid gland is most significant of a serious state of affairs, and the long-continued suppuration from the wound shows most unmistakably that the ball has not, as was hoped, become encysted, but by its presence is a source of constant irritation, and is keeping up a continued discharge. Everything is being done for the patient that can be done. Every confidence is very justly reposed in his medical advisers, and, come what may, there can be no cause for blame attached to them. The safe removal of the ball, owing to depth and the uncertainty of its precise locality, is, no doubt, an impossibility, or it would have been accomplished long ere this. His weakness and emaciation; his long-continued high temperature; the constant drain upon the system, and, above all, the tangible evidence of blood-poisoning, all point towards a fatal termination, sooner or later. We would fain hope for the best, but we fear the worst.

LIABILITY OF PHYSICIANS.—A rather curious case has been recently decided by the Supreme Court of Michigan. A doctor being called to attend an accouchement, took with him a person who was not a physician, to act as assistant. The husband having subsequently discovered that the as-

sistant was not a medical man, brought an action for damages against the doctor. The complaint was, that the physician had brought as his assistant without disclosing his character, one who was not a professional man. It was not shown that the doctor had represented him as a physician, or that there had been any lack of skill on the part of the former or misbehaviour on the part of the latter, or that either husband or wife had objected to his presence, in fact they had consented. The jury gave a verdict for the plaintiff, and upon the case being appealed to the Supreme Court to test the question of the physician's liability, the judgment was affirmed by that tribunal. In rendering judgment the court declared that "it would be shocking to our sense of right, justice and propriety to doubt even that for such an act the law would afford an ample remedy. To the plaintiff the case was a most sacred one, and no one had a right to intrude unless invited or because of some real and pressing necessity, which it is not pretended existed in this case."

JAMAICA AS A WINTER RESIDENCE.—As a winter residence for persons suffering from lung affections, the Island of Jamaica has many advantages. Dr. J. J. Hillary, who formerly practiced in Uxbridge, Ont., in a letter lately received from him says, "the climate cannot be surpassed on this side of the Atlantic." The thermometer never reaches 90° F., nor falls below 75° the year round. He would strongly advise persons troubled with chest affections to try this climate for the winter. Those contemplating a change of climate would do well to correspond with him, before going elsewhere. His address is Annatto Bay, Jamaica.

APPOINTMENTS.—Dr. John Ferguson has been appointed Assistant Demonstrator of Anatomy in the Toronto School of Medicine. Several of the present occupants of subordinate chairs in the school have also been appointed *adjunct* Lecturers on Surgery, Midwifery, Therapeutics and Anatomy, respectively.

Dr. James Fulton, of St. Thomas, has been appointed surgeon of the United Canada Southern Air-Line Brakemen Association.

Dr. Seivewright, of New Westminster, B.C., has been appointed Medical Officer for the port of Burrard Inlet.

MEDICAL COUNCIL OF NEW BRUNSWICK.—The Medical Council of the Province of New Brunswick was formally inaugurated on the 19th of July. The following are the names of the members, of whom the first five mentioned were appointed by the New Brunswick Medical Society, and the last four by the Governor-in-Council: Drs. McLaren, Hamilton, and Travers, of St. John; A. B. Atherton of Fredericton, and Vail of Sussex; Drs. Bayard, Preston (Homocephist), of St. John; Brown of Fredericton, and A. C. Smith of Newcastle. Dr. Bayard, of St. John, was appointed President; Dr. Currie, of Fredericton, Registrar and Secretary of the Council, and Dr. Hamilton, Treasurer.

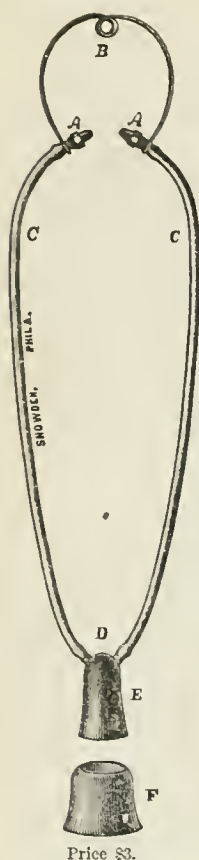
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Drs. H. A. DeLom and W. F. Chappell, of Trinity Medical College, Toronto, successfully passed the required examination for the diploma, and were admitted members in July last. Dr. Thomas R. Dupuis, of Kingston, also successfully passed the same examination, and was admitted to membership.

MEDICAL M.P.P.'s.—Dr. Kincaid, of Peterboro', has been elected, by the concurrence of both political parties, to represent West Peterboro' in the Local Legislature. Dr. D. H. Wilson, of Nelsonville, has been elected member of Parliament for North Dufferin, Manitoba.

BATHURST AND RIDEAU MEDICAL ASSOCIATION.—The following officers have been elected for the ensuing year:—President, Dr. Cranston; 1st Vice do., Dr. Lafferty; 2nd do., Dr. Baird; Secretary, Dr. Bentley; Treasurer, Dr. Hill.

MATRICULATES IN MEDICINE, TORONTO UNIVERSITY.—The following gentlemen recently passed the matriculation examination in the faculty of medicine:—H. Bascombe, E. Bourke, F. W. Cane, W. McK. Dougall, A. S. Draper, W. N. Goodall, W. H. Murray, D. M. Stabler.

CORONERS.—Thomas Norton, M.D., of Horning's Mills; Joseph Carbert, M.D., and James Henry, M.D., of Orangeville; Robert Lawrence, of Mono Mills, and Thomas Turnbull, of Mono Centre, have been appointed Coroners for the Co. of Dufferin, Ont.



NEW STETHOSCOPE.—We give herewith a cut of a stethoscope recently devised by W. Snowden of Philadelphia :—

The advantages claimed for this instrument are its simplicity of construction, superior acoustic properties, and ready adaptability to all positions of both patient and physician. It is composed of a hard wood bell (E), with a soft rubber cup (F), two flexible rubber tubes (CC), attached to the upper portion of the bell by two perforated nipples at (D), two ear pieces (AA), of hard wood covered with soft rubber pads, the whole completed by a wire spring (B), so arranged as to retain the ear pieces firmly in position when in use. We have had one in use for a short time, and are much pleased with it.

Books and Pamphlets.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, ESPECIALLY IN WOMEN. By S. Weir Mitchell, M.D., Philadelphia, 1881 : Henry C. Lea's, Son & Co. Toronto : Willing & Williamson.

This little octavo of 233 pages, presents, in thirteen compressed lectures, an amount of clear practical instruction, on one of the most bewildering departments of medicine, which the patient reader might often in vain seek for in books of tenfold its bulk. On every page the author has contrived to introduce attractive and instructive facts, and lucid observations, which at once attest his mastery of the subject, and command the studious attention of the thoughtful reader. As illustrative of the peculiar merits of Dr. Mitchell's little book, we believe we cannot do better than to quote here a few passages which have seemed to us indicative of sound practical knowledge and

matured reflection. Speaking of the treatment of "those difficult combinations of hysteria with defective nutrition, which are often too much for the best of us," Dr. Mitchell thus summarily disposes of the quondam accredited therapeutics of the malady.

"I have some belief in the occasional value of induction currents in hystero-palsies, but, as to the direct good to be had out of the drugs on which men once relied in the treatment of this disease, I have said nothing, because, except to condemn, I had nothing to say, and because I believe that the numberless remedies for hysteria, to be found in the books, will be swept by another generation into the limbo provided for drugs with decayed reputations ; but in thus expressing myself I do not mean to say that no drugs have an indirect value."

In his 4th lecture, on "*Mimicry of disease*," we light upon the following little gem, in connection with a most dramatic case of precocious neurosis in a girl of thirteen :—"My patient, when first seen by me, had been abandoned by two homœopathic physicians, who had left for her use a prescription of *rather ample doses of morphia*." No doubt, had this girl died soon after being deserted by the brace of infinitesimals, they would have held that she had fallen a victim to allopathy.

On pages 101, 102, 107, 125, 135, 149, 150, 155, Dr. Mitchell details some very instructive cases of formidable nervous diseases, induced by over-work of brain, which might very profitably be studied by some of our educational authorities. If the present system of "intermediate examinations" fail to bring forth a rich crop of life-long neuroses and fatal organic diseases, then may we believe that the laws of nature are not unchangeable.

The following passages found in Dr. Mitchell's concluding lecture, we may leave to speak both for themselves and their author :—"Nothing, I think, can be more melancholy than an honest survey of the amount of good done in hysteria by the host of drugs which go to form the so-called therapeutics of the disease. In disorders where time is valuable, we may find a happy resource in the famous class of anti-spasmodics, but as a rule they are swiftly disappearing from the apothecary's prescription files, and the physician of our day who is called upon to treat hysteria, or general nervous-

ness or neurasthænia, wisely contents himself with a careful estimate of causes, and an effort to deal with these by patient treatment."

"The treatment to which in these pages I so many times refer, consists in an effort to lift the health of patients to a higher plane by the use of seclusion, which cuts off excitement and foolish sympathy; by rest, so complete as to exclude all causes of tire; by massage, which substitutes passive exercise for exertion; and by electrical muscular excitation, which acts in a somewhat similar manner to massage, and with it, by depriving rest in bed of its essential evils, leaves only its good."

"I do not say that seclusion is impossible in the home of the invalid, for I have obtained it with success many times, when my nurse was a thoroughly good one; but the other plan of securing it by a change of dwelling is better and far easier. Seclusion, of course, has for its objects the cutting off of many hurtful influences; but above all, it means the power of separating the invalid from some willing slave, a mother or a sister, whose serfdom, as usual, degrades and destroys the despot, while it ruins the slave." * * * *

"If the patient and nurse do not agree, make a change, and if need be another."

Note.—If the physician changes nurses as often as a capricious or mendacious hysterique chooses to manufacture a quarrel, he may prepare himself for wondrous evolutions before realising *the survival of the fittest*.

"I cannot enough emphasize this matter of the nurse. Put yourself in the place of an intelligent lady shut up for two months with a coarse woman, whose talk and whose habits disgust, and doubly disgust, because the victim is emotional and sensitive by nature and by habit, and you will realise the need for care in your choice of an attendant. *Mere technical training will not answer, and I have seen an utterly untrained woman, of good brains and tact, win successes which are sometimes denied to the best educated nurses who lacked these ever-needed moral qualities which no training and no length of experience will give to some women.*"

The italics of the preceding lines, as well as some others preceding, are not those of the author. We have taken the liberty of so marking his words because of their great force and value. A so-called *trained nurse*, who lacks those indispensable quali-

ties of head and heart, which no training can impart, but on the contrary, which become substituted by overweening self-conceit, disgusting arrogance, incorrigible insubordination or extemporised sycophancy, is, we are convinced, the greatest curse that can alight on either an earnest physician or his afflicted patient.

TREATISE ON DISEASES OF THE JOINTS. By Richard Barwell, F.R.C.S. Second Edition. New York: William Wood & Co. Toronto: Willing & Williamson.

The thanks of the profession are due to Messrs. Wood & Co. for the admirable series of most valuable works they have for the last three years furnished the members—at a cost so trifling as to be accessible to all—in their Library of Standard Medical Authors. Prominent among their selections will stand this most excellent and exhaustive treatise on Diseases of the Joints by this eminent writer on this subject, Mr. Barwell. Our space will not permit the detailing of the author's exhaustive physiological and pathological anatomy contained in the first chapter of the volume, but there are many other points of great interest in the succeeding chapters to which we will make brief allusion. If we mistake not, Velpeau, in 1843, was the first to announce the success he had experienced in the puncture and subsequent injection of a solution of iodine in cases of acute synovitis. Mr. Barwell adopts freely the former by means of the aspirator, but is significantly silent on the heroic treatment involved in the latter. The fifth chapter, on Strumous Synovitis, contains many valuable suggestions. In the first stage the essentials of treatment are to be recognized in first, good position; second, total and entire rest; firm compression of joint; iodine application externally, and in this form, injection into the diseased tissues of iodized solutions (3ss. of tincture of iodine to ʒvii. of water. In the fourteenth chapter, on Diseases of the Hip Joint, Mr. B. mentions the singular fact that nearly all the boys admitted for Hip Joint Disease into the Charing Cross Hospital had phymosis, and that in a large proportion of girls affected with the same disease, vulvitis and vaginitis, with or without discharge existed. Further, that in hospitals for the Jews, few cases of hip disease are to be found, and that most of those received belong not to the Jewish but to the

Christian community. Mr. B. accounts for this by the fact that phimosed children have facile frequent and long continued priapism; that this condition after a time produces a certain irritability of the lumbar spinal cord. That the influences of spinal irritation on the trophic nerves are well-known, and that just at that particular period large trophic changes are in process about the hip joint. Chapter xviii. contains valuable information on the restoration of crippled joints; chapter xix. on operations for deformities of the knee; and chapter xx. is an admirable treatise on the removal of diseased joints. The style in which this work is written is lucid and forcible, and the practical ideas conveyed cannot fail to make the reader rise from its perusal with increased respect for the author.

REFRACTION OF THE EYE, ITS DIAGNOSIS AND THE CORRECTION OF ITS ERRORS. By A. Stanford Morton, M.B., Senior Assistant Surgeon Royal South London Ophthalmic Hospital.

We have just received this excellent little volume, written by Dr. Morton. It is principally intended for students and practitioners beginning the study of refraction, being concise, well-arranged and remarkably clear in its definitions. Dr. Morton has managed to put all the leading facts in a small compass, without rendering them unintelligible, as is too often the case. We cordially recommend the work.

A MEDICAL FORMULARY, based on U. States and British Pharmacopœias. New York: William Wood & Co. Toronto: Willing & Williamson.

In this work the less important of the drugs and preparations of the Pharmacopœia are omitted. It will be found useful for students preparing for examination.

UNIAO MEDICA—PUBLICACAO MENSAL. The Medical Union. A monthly publication in the Portuguese language; edited by Drs. C. de Fraitus, J. de Mosera, Moncorvo, Mousa Brazil and Silvia Aranje, in Rio de Janiero, Brazil.

We beg to acknowledge the receipt of the first six numbers, from January to June inclusive, of the above new journal, which we hail as a very promising accession to the medical literature of America. The scientific merit of the contributions, enhanced as it is by the clear and correct typography, and the superior quality of the paper, can not fail to secure to the talented and spirited *Redac-*

tores and publishers a fair share, even in the indolent empire of Brazil, of professional sympathy and support. The lecture of *Professor V. Saboia*, in the January number, on *Benign Fungus of the Testicle*, is replete with valuable instruction, and affords a very gratifying illustration of the elevated position to which surgical science has been raised by our southern continental confreres. We might extend our approbatory remarks on several other articles, did our present available space permit the indulgence. In future issues of the *Lancet*, we may avail of translations from the pages of *Uniao*, which may appear to us deserving of reproduction, suited to the requirements of our readers.

THE POPULAR SCIENCE MONTHLY. D. Appleton & Co., New York.

The August No. of this periodical is a rich one. The first article is a lecture by *Prof. Huxley* on the *Herrings*. It abounds with interesting and highly instructive facts. The second article, by *Felix Oswald, M.D.*, on *Physical Education—Recreation*, is characterized by the wonted force and boldness of this writer. It is, we fear, rather too heterodox to command the approval of any large proportion of the reading community, and may therefore fail to benefit those who stand most in need of improvement. *School-Room Ventilation*, by *Dr. P. Higgins*, should be earnestly perused by all interested in the education of the rising generation. Not only should its contents command the attention of all teachers and inspectors of schools, but also of all parents and guardians. *Intelligence of Ants*, by *George J. Romaines*, is a truly pleasing brochure, which will well repay the lover of natural history. "Go to the ant, thou sluggard, consider her ways, and learn wisdom!" Go to *G. J. Romaines'* ants, all who love to contemplate the wonders and wisdom of creation, and you will find your own intelligence much improved by your study of the social polity and the industrial regulations of these tiny active creatures.

Births, Marriages and Deaths.

At Mildmay, Ont., on the 22nd of July, Neil Fleming, M.D., aged 42 years.

In Ottawa, on the 23rd ult., Hon. Dr. Brouse, in the 57th year of his age.

At Thornbury, Ont., on the 22nd ult., Henry Parsley, M.D., M.C.R.S., Eng., aged 73 years.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

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Original Communications.

TREATMENT OF SCARLATINA MALIGNA BY THE USE OF COLD WATER AND ICE.

BY A. WORTHINGTON, M.D., IROQUOIS, ONT.

(Read before the Canada Medical Association at Halifax,
N.S., August 3rd, 1881.)

MR. PRESIDENT AND GENTLEMEN,—The purpose of this paper is to place before you my brief experience in the treatment of Scarlatina Maligna by the use of cold water and ice, which I was induced to adopt in 1855, and since then have continued and still continue to use. Should the interests of the profession be benefited by my experience my object will be attained.

Scarlet fever is a disease always to be dreaded by the physician, as no calculation can be made when he may not meet a malignant case, even in the milder forms of the epidemic. It exhibits some striking peculiarities. The onset may be sudden and violent, destroying life in as short a time as does cerebro-spinal meningitis; or a case may run a violent course without the slightest appearance of the characteristic eruption; or a very mild attack, without the eruption, may be followed during desquamation by acute disease of the kidneys. The throat may be attacked in the most violent manner without eruption and the patient continue conscious throughout the attack. Patches of fibrinous exudation may appear upon the fauces, and rapid suppuration of the submucous tissue of the pharynx may occur, not unlike the sudden formation of pus in the severer forms of erysipelas; or the brain may first become involved, the poison rapidly assuming control, the normal cerebral functions ceases to be performed, and the patient lies in a muttering delirium, gradually deepening into coma, and if the malady remains

unchecked, death speedily puts an end to the scene. The peculiar features mentioned fell under my observation during the extensive and terrible epidemic of 1855-6, which prevailed in the County of Dundas, Ont. My first case occurred in the summer of 1852, the patient being a bright girl of three years. She was apparently asleep when I arrived. Her pulse was rapid; skin hot and breathing hurried. Her head seemed to be very hot. (No thermometers in use then.) In a few minutes she went into a violent convulsion, became comatose, and died that evening. A purplish rash was seen under the cuticle. The attack in this case was so overwhelming that I could do nothing. A few milder cases occurred, and I made use of the remedies recommended in our text-books, and succeeded in losing about one in three cases, or 33 per cent. The disastrous results of my efforts made such an impression upon me, that I decided not to attend scarlet fever patients, if I could avoid it, unless I could find some successful mode of treatment. During the following year, when looking up the literature of scarlatina, I came upon a small work on children, by J. F. Meigs, of Philadelphia, in which I found a letter to the author giving the history of a number of cases treated by cold sponging, ice to the throat, externally and internally, and ice-water poured over the head and body, nearly all of which recovered. This letter was written at the request of the author by Dr. Hiram Corsen, of Pennsylvania, in which he credits the origin of the cold water treatment to Dr. Samuel Jackson, whose articles on the subject appeared in the *American Journal of Medical Sciences* for May and August, 1847. The perusal of this letter fully decided me to make a fair trial of the cold treatment as soon as occasion should offer, or, in case of decided objection to cold, not to treat the case. I had but a short time to wait, as in the spring of 1855 the epidemic mentioned broke out and proved to be very malignant and extensive. It visited most of the families within my circle, and became a perfect terror to parents. I was called first to a family in the village of Iroquois, in which there were five children down with scarlet fever. I at once told the parents my convictions as to treatment, and obtained liberty to do as I pleased. The cases were severe, but not malignant. I had cloths wrung out of cold water and kept constantly about their necks, and cold water

poured over their heads, and their bodies and limbs sponged with cool water as often as needed to control the intense heat and prevent too much swelling of the neck. They all recovered, without any of the usual consequences, in about eight to ten days. The results noted in these cases were that the acute stage lasted about five days, and convalescence was very rapid after that. For nearly a year I was constantly in attendance on scarlet fever patients. Some amusing instances of prejudice to the use of cold water occurred. I was called about seven miles to a family, and found the mother with her face buried in her hands and resting on the table, sobbing bitterly. I asked her what the great trouble was, to which she replied that all the children had scarlet fever and were going to die. I replied that I thought they could be saved. She said you will not use any cold water, of course. I replied that if she did not wish any cold water used I did not wish to attend, as I could not ensure a favorable result. She gave a very reluctant consent, and, on looking around, I found all the children (nine) down with scarlet fever, three of whom (boys) were delirious, and had been for several hours. I directed large dishes to be placed at the bed of each, and a pail of cold water to be brought in. I filled a small pitcher and began pouring water on the head of one of the boys, but the mother, who had been watching my movements, placed her hand on his head to intercept the stream, moving her hand as I moved the pitcher. She soon grew tired and I had my own way. After about two hours of constant work, going from one to the other and using the water freely, both on their heads and necks, I succeeded in restoring reason. I had now the full confidence of the parents. Two faithful attendants were procured, and I gave them strict orders not to leave them under any circumstances, and to pour water on their heads, as needed to prevent delirium, and to put thick cloths wrung out of cold water around their necks, and to change them every few minutes to control the swelling, and, if necessary, to pour the water on their necks for a few minutes at a time, should the swelling appear to increase. I may say here that in many instances the glands of the neck gave the first indication of the attack, and, if not interfered with, would in a few hours become so much swollen as to impede and finally to prevent deglutition and seriously interfere with

respiration. The pharynx, soft palate and tonsils, became intensely congested, and in the severest cases the color was quite purple. Patches of a dirty white color appeared on the soft palate and tonsils, and were not removable, and when the throat was first attacked it was decidedly the worst feature of the case, and, if permitted to run for 36 to 48 hours without check, could rarely be controlled, and was usually followed by delirium, coma and death. I returned the next morning to find that my instructions had been fully carried out, and my patients not only no worse, but were holding well up against the influence of the poison.

I gave only some compound jalap powder to move the bowels. My nine patients all recovered without any bad sequelæ. A peculiar feature in the oldest boy's case, and which I never saw in any other was, that desquamation of the entire mucous surface of the tongue took place in the form of blisters of the size of a five cent piece. He was in great misery for a week, but, with the use of cold and emollient applications, he was soon better. I may here remark that the few cases which took an adynamic form and in which the rash was seen of a dark red or purple color, always improved on reducing the temperature; the rash changing to a bright red and coming out fully to the surface. The application of cold to the entire surface caused the rash to disappear, if long continued; but it always returned with increasing temperature and improved in appearance, nor, as I at first apprehended, was there any danger from metastasis. Very soon after, I was called to see an only son, aged 17, who had been brought down so suddenly and violently that his mother was in great distress when I arrived. The rapidity and violence of the attack alarmed me, as I had not seen any recover with a similar attack under the usual form of treatment. His mother at once asked me what the disease was and if I could save him. I told her that it was probably a very bad attack of scarlet fever, but that I thought I could get him through. She said, "You won't use cold water, will you?" I replied as in the other cases, that I would rather not take charge of the case, and prepared to leave, when she decided to place him under my control. The attack commenced early in the afternoon of this day, and his condition was (9 p.m.) as follows: Pulse 120, very hot; respiration hurried; was delirious and restless, and

could not be roused. I had a pail of the coldest water that could be brought in, and while two assistants held his head clear of the bed, I poured the water gently all over it for nearly an hour, when he could be roused, and with a little further application he became quite himself. I directed the nurse, in anticipation of the throat difficulty, to apply thick cloths wrung out of the coldest water and frequently changed; but, after all the precautions, I had to remove the cloths and pour the water over his neck for some time and repeat the process from time to time to keep the swelling under control. The rash appeared during the night. I found on remitting the applications for even a short time the rash became abundant, the skin intensely hot, and the delirium returned. (He had no medicine, except to move his bowels as needed.) The constant application of cold water, more especially to the neck and head, was continued through the first four days and nights of the attack, the crisis usually taking place on the fifth day, which proved true in this case. He was able to be up on the seventh day and required but little more attendance. Several cases came under my care where I could not inspire confidence in the cold treatment, and in every such case the disease either ran a lengthened course and the patient finally succumbed, or convalesced slowly with the loss or impairment of hearing, smell, or the destruction of a portion of the soft palate and nasal mucous lining. During the prevalence of this epidemic two rather remarkable cases occurred. A. H., aged 19, requested me to examine her throat, in which there was a heightened color of the tonsils, but no swelling. I told her she was threatened with quinsy, gave a diaphoretic and desired her to leave school for a few days, and when home to apply a cold wet cloth to her throat. I was sent for in the afternoon and found her complaining of her throat very much, but could see only increased redness and a fulness of the soft palate. Pulse 100 and some fever, but nothing serious indicated. Sent for again about 9 p.m. same evening, and found all the parts within much congested, having a purplish-red appearance and considerably swollen. Externally, the neck, especially in the region of the parotid and sub-maxillary glands, was becoming enlarged. Pulse 130; skin very hot, and breathing hurried with great restless-

ness. Her mind remained clear throughout. I told the parents that there could be no doubt but it was malignant scarlatina, and that there was but one way to save her, and that was to apply cold in the most constant and energetic manner. Cloths were wrung out of the coldest water and put around the neck and changed every few minutes, and the water poured on occasionally to ensure a constant degree of cold. Her mouth and throat were frequently gargled with cold water, as ice could not be had. This gave great relief. No medicines or nourishment could be given, as she could swallow nothing. Second day—I had little hopes of my patient, but directed them not to intermit the treatment in the least. No fibrinous patches were to be seen, nor was there any appearance of rash throughout. Pulse same as yesterday and temperature very high. She was still conscious, but inclined to drowsiness and stupor. Third day—Patient much the same as yesterday; but there is a feeling of great fulness in the throat and sense of suffocation. Pulse 134; very compressible and temperature very high; extremities inclined to be cool. She is greatly prostrated,—cannot swallow the least thing. Between my visits this day an abscess in the throat broke and discharged several ounces of pus and blood, nearly suffocating the patient. I found my patient in the evening more calm and breathing more easily. Pulse 120 and throat looking better. The tongue, as in every case, was intensely red. I directed a continuance of the treatment sufficient to control the fever, and to give milk as soon as she could take it. Fourth day—Much improved this morning—took some milk during the night—ordered chicken broth, and to keep the cold still to the throat. Fifth day—Patient rapidly convalescing. I had no further trouble, and at the end of three weeks she was again teaching. Case 2.—On the fifth day of the first case, her sister suffered an attack of the same character, and, if possible, more severe. It ran the same course and terminated in recovery in about the same time. The treatment was carried out with the same energy and perseverance as in case 1, and being earlier commenced, there was no suppuration—no appearance of rash, and desquamation followed in each case. Convalescence was equally rapid as in the first case. Was the disease communicated from 1st to 2nd

case? Was it scarlatina maligna? Two mild cases came under my notice with no appearance of rash, one of which was followed by dropsy. W. B., aged 40, sent for me during the night. I found him very uneasy and considerably alarmed about the swelling of his feet, legs and face, which had suddenly appeared. I declined doing anything, and said he should at once send for his regular medical attendant. He said he could not do so till morning, and he must have something to relieve his distress, and asked what his disease was. I replied that he had had scarlet fever, and dropsy had followed from exposure. Most of his family were sick with scarlet fever at this time. He said he had not been sick, but the doctor had given him some medicine for his appetite, but he knew he had not had scarlet fever. I gave him a strong purgative and left. The next day I received a note from his doctor, saying he could not attend and asking me to take charge of the case. He recovered under treatment for dropsy. The second case was my sister, who was attacked with all the usual symptoms of scarlet fever, which terminated in the usual manner, followed by desquamation, but there was never the slightest appearance of the characteristic eruption.

An epidemic of scarlatina occurred in 1863 in the northern part of Huron County, which proved fatal in a number of cases, where my former experience had led me to think they ought to have been saved by the cold water treatment, and I confess to considerable disappointment at my want of success, though on the whole the cold treatment was successful. There was a difference in a remarkable way in the character of the epidemics of 1855 and 1863. That of 1855, in most of the malignant cases, attacked the brain, and through it the nervous system, producing a tendency to death by coma, and indicating such a form of treatment as would relieve the brain from the overwhelming effects of the poison. This was most effectually found in the cold water treatment, very little support being needed; while in the epidemic of 1863 the heart seemed to be the point of attack, causing great debility and prostration, producing a tendency to death by asthenia, indicating the necessity of tonics and stimulants from the first, as also strong nutrition and moderate application of cold, more especially to the throat. The mind in the last mentioned epidemic usually remained clear,

and I have reason to think that if I had commenced the use of tonics and stimulants earlier I would have saved several patients who ultimately succumbed.

ON WATER ANALYSIS.

BY J. W. MACDONALD, M.D., EDIN., L.R.C.S.E.,
MEDICAL OFFICER TO THE STEEL COMPANY
OF CANADA, LONDONDERRY, N.S.

(Read before the Canada Medical Association, Aug. 4, 1881).

I am frequently asked by both medical men and laymen to give some ready methods by which the fitness or unfitness of water for domestic purposes can be ascertained. In answering the question several difficulties present themselves. The cost of apparatus for a complete examination of water is a serious matter; few persons have the time or the inclination to carry out detailed chemical analyses, and, lastly, a conclusion as to the purity or impurity of water must be based upon a collation of all the evidence that can be obtained, rather than from the results of one or two tests. The vital importance of the subject, and the lively interest which is being awakened in regard to it, have led me to attempt the description of water analysis which will be sufficient for ordinary purposes, and at the same time fall within the means and the opportunities of every medical practitioner. Two years ago I imported from Savory & Moore, of London, one of Parke's Cabinets for water analysis. It cost me, inclusive of duty, about one hundred and fifty dollars, and nearly one-half of the contents was destroyed by breakage. As few would feel disposed to go to that expense, I have endeavored to meet the difficulty by preparing a small, cheap, and at the same time efficient case of chemicals and apparatus, which should not cost more than \$12 or \$14. The case is 18 inches long, 5 inches wide, and 9 inches high. It contains the following chemicals in three-ounce bottles:

Standard solution of nitrate of silver, solution of yellow chromate of potash, solution of soap, solution of nitrate of barium, two shaking bottles for soap test, Nessler's solution, dilute sulphuric acid, sol. of iodide of potassium and starch, oxalate of ammonium, standard sol. of ammonium chloride,

standard sol. of permanganate of potassium. The apparatus consists of 1 flask with ring for boiling, 2 india-rubber caps with two necks, 1 retort stand, 1 burette with clamp, india-rubber tubing, spirit lamp, 5 test tubes, glass rod, glass measure 50 C.C.

In the examination of water the coarser physical characters, such as color, smell, taste and transparency should first be noted. The *color* is best observed by pouring the water into a tall glass vessel and looking down upon it. Perfectly pure water has a bluish tint, and the bottom of the vessel is clearly seen through several feet of water, while some waters are so turbid as to obscure the bottom when only a few inches are looked through. A green color as a rule indicates vegetable impurity, a yellow or brown color (excepting in peat water), animal impurity. *Smell* is best observed by warming, boiling, or distilling the water, when characteristic odors are frequently given off. The evidence derived from an examination of the physical characters is very unreliable. We must, therefore, proceed to an examination of the dissolved solids which gives us the most valuable evidence. The examination is divided into the qualitative and quantitative :

I. *Qualitative*.—The most useful tests are the following :—

SUBSTANCES SOUGHT FOR.	RE-AGENTS TO BE USED, AND EFFECTS.
Reaction...	Litmus and turmeric papers—usual red or brown reactions.
Lime	Oxalate of ammonium—white precipitate.
Chlorine	Nit. of silver and dilute nitric acid—white precipitate becoming lead color.
Nitrous acid.....	Iodide of potassium and starch in solution—a blue color.
Ammonia	Nessler's solution—a yellow color, or yellow-brown precipitate.
Nitric acid.....	Sol. of sulphate of iron and pure sulphuric acid—olive-colored zone.
Oxidizable matter, including organic matter	Permanganate of potassium—red color disappears.

II. *Quantitative*.

1. *Determination of Chlorine*.—Prepare a solution of nitrate of silver by dissolving 17 grammes in one litre of water. Take 100 C.C. of the water to be examined, place it in a white porcelain dish, add enough solution of yellow chromate of potash to make it just yellow. Then add the nitrate of

silver solution from a burette, and stir. A red color is produced which disappears as long as any chlorine is present. Stop when the least red tint is permanent, then read off the number of C.C. of silver nitrate used ; each of these represents 3.55 milligrammes of chlorine. Multiply by 10 to give the amount per litre, and this again by .07 for grains per gallon. Chlorine in water is very suspicious of the presence of the liquid excreta of men or animals. If, in addition, we find nitric and nitrous acids, ammonia and phosphoric acid, the evidence is very strong. Chlorine, however, may be due to strata containing chloride of sodium or calcium. In this case the water is alkaline from sodium carbonate. In some cases the chlorine is due to impregnation from sea water. It is then large in quantity, there is also magnesia and little evidence of organic matter.

2. *Hardness*.—This is estimated by Clarke's soap test, and by it we determine—

1. Total hardness, representing the aggregate earthy salts and free carbonic acid.

2. The removable hardness, or that which disappears on boiling.

3. The permanent hardness which is unaffected by boiling.

By the soap test can also be determined the amount of certain constituents, such as lime, magnesia, sulphuric acid, and free carbonic acid.

Apparatus required for the soap test.—Measure of 50 or 100 C.C. Burette divided into tenths of a cubic centimetre ; two or more stoppered bottles to hold about four ounces. We also require to have the following solutions :

1. *Standard Solution of Barium Nitrate*.—Dissolve .26 grammes of pure barium nitrate in one litre of water, or 18.2 grains to 1 gallon. A concentrated solution of ten times this strength may be made and diluted with 9 parts of water when used.

2. *Solution of Soap*.—Dissolve a piece of soft potash soap of the British Pharmacopœia in equal parts of water and alcohol ; filter and then graduate as follows :

Put 50 C.C. of the standard solution of barium nitrate into the shaking bottle, and add to it slowly the soap solution from the finely graduated burette. After each addition shake vigorously and place the bottle on its side. Continue this until you have a thin beady lather over the whole surface

permanent for five minutes. Read off the amount of soap solution used; if exactly 2.2 C.C. have been taken the solution is correct. If less the soap solution must be diluted with spirit and water. The amount of dilution can be ascertained by a simple rule. Suppose 1.8 C.C. have been used and the whole of the unused soap solution measures 200 C.C., then

$$\text{As } 1.8 : 2.2 :: 200 : x \\ x = 244.4 \text{ C.C.}$$

The 200 C.C. must then be diluted with equal parts of spirit and water to 244.4 C.C.

With these solutions, and having all glasses, burette, etc., perfectly clean, for the least quantity of acid would destroy the accuracy of the process, we can proceed as follows:

1. To determine the total hardness of the water: Take 50 C.C. of the water in a stoppered bottle, and add the soap solution from the burette, shaking strongly after each addition until a lather permanent for five minutes spreads over the whole surface without any break. Then read off the number of tenths of soap solution used. From this number subtract 2, as that quantity is necessary to give a lather with 50 C.C. of the purest water. The soap solution which has been used indicates the hardness due to all the ingredients which can act upon it, as a rule, they are lime, magnesian salts, iron, and free carbonic acid. It is usual to express this hardness by degrees of Clark's scale. Though dependant upon various causes it is considered as so much calcium carbonate per gallon, one grain of calcium carbonate being one degree of Clark's scale.

The calculation is as follows: Each tenth of the soap solution corresponds to .25 milligrammes of calcium carbonate. Multiply this co-efficiently by the number of tenths of soap solution used, and the result is the hardness of 50 C.C. Multiply by 20 for the amount per litre, and by .07 for grains per gallon, or degrees of Clark's scale.

To obtain the permanent hardness.—Boil a known quantity briskly for half an hour, replacing the loss with distilled water from time to time, cork the vessel and allow it to cool. Then determine the hardness in 50 C.C. as before.

Removable hardness.—This is very easily calculated, for we have only to take the difference between the total hardness and the permanent hardness and express the result as removable

hardness. The permanent hardness is the most important, for it represents the most objectionable earthy salts, viz.: calcium sulphate and chloride, and the magnesian salts. The permanent hardness of good water should not exceed 3° or 4° of Clark's scale.

The next step in our investigation is the

Determination of free or saline ammonia and of nitrogenous organic matter.—Ammonia in water is chiefly derived from organic substances, either vegetable or animal. In the detection and estimation of ammonia the very delicate test known as Nessler's solution is of the greatest value.

Nessler's Solution is thus prepared: Dissolve 50 grammes of iodide of potassium in 250 C.C. of distilled water; reserve a small quantity, warm the larger portion, and add a strong aqueous solution of corrosive sublimate until the precipitate ceases to disappear, then add the reserved solution of iodide so as to just dissolve the red precipitate; filter and add to the filtrate 200 grammes of solid potash dissolved in boiled water. Dilute to 1 litre and add 5 C.C. of a saturated aqueous solution of mercury bichloride. Allow to subside, decant the clear liquid, and keep in a dark place.

In addition to this solution we require

Standard Solution of Ammonium Chloride, which is of the strength of .0315 grammes to 1 litre of water, each C.C. represents .01 milligrammes of ammonia. The mode of procedure is as follows: Place in a flask 250 C.C. of the water to be examined, distill off about 120 C.C.; measure this distillate carefully, test a little with Nessler's solution in a test tube and observe the color; if not too dark take 100 C.C. of the distillate and put it into a cylindrical glass vessel, and place it upon a piece of white paper. Add to it 1½ C.C. of Nessler. Put into another similar cylinder as many C.C. of ammonium chloride as may be thought necessary and fill up to 100 C.C. of pure distilled water, which has previously been proved to be free from ammonia; drop in 1½ C.C. of Nessler. If the colors correspond the process is finished, and the amount of ammonium chloride used is read off. If the colors are not the same add a little more ammonium chloride so long as no haze shows itself; if it does, then a fresh glass must be taken and another test made. When the colors correspond, read off the C.C. of ammonium used, allow for the portion of distillate not used,

multiply by .01 and we have the number of milligrammes of free ammonia in the 250 C.C. acted upon; multiply this amount by 4 and we have the number of milligrammes per litre. Example—From 250 C.C. of water, 123 were distilled, 100 C.C. were taken for the experiment, 4.5 C.C. of ammonium chloride were required to give the proper color; then $4.5 \times \frac{1}{100} \times .01 \times 4 = 0.2214$ milligrammes of free ammonia per litre. The free ammonia or saline ammonia is the ammonia combined with carbonic, nitric or other acid, and also what may be derived from any easily decomposable substance such as used. The quantity should not exceed .02 milligrammes per litre in good water.

Having calculated the free ammonia, the residue of the water in the retort is used to determine the nitrogenous organic matter as measured by albuminoid ammonia. The nitrogen is converted into ammonia by means of potassium permanganate in presence of an alkali, the ammonia is then distilled off and estimated as above.

Dissolve 8 grammes of permanganate of potassium and 200 grammes of solid caustic potash in 1 litre of water, boil thoroughly to drive off any ammonia and any nitrogenous matter. This is known as Wanklyn's solution. Add to the residue in the retort 25 C.C. of this solution, distil over 110 to 120. Calculate the ammonia as before, and state the results in this case as *albuminoid ammonia*. The standard limit of albuminoid ammonia in good water is stated by Wanklyn to be .05 milligrammes per litre, some other authorities place it at .08. Much albuminoid ammonia, little free ammonia, and almost entire absence of chlorides, is, according to Wanklyn, indicative of vegetable contamination.

OXIDIZABLE MATTER.

The chief sources of oxidizable matter in water are oxidizable organic matter, and nitrous acid as nitrates. The estimation of these affords valuable evidence of the character of water, and they are conveniently determined by means of permanganate of potassium. We calculate 1. *Total oxidizable matter* in terms of oxygen required for its *oxidization*. Make a solution of permanganate by dissolving .395 grammes of the crystallized salt in 1 litre of water. Each C.C. of this solution yields 0.1 milligrammes of oxygen in presence of an acid. Test its accuracy by a solution of crystal-

lized oxalic acid of the strength of .7875 grammes to the litre of water. This solution acidulated with dilute sulphuric acid should exactly decolorize an equal quantity of the solution of permanganate. The process, as recommended by Woods, is as follows:

"Take a convenient quantity of the water to be examined, say 250 C.C., add 5 C.C. of dilute sulphuric acid (1 to 10); drop in the permanganate solution from a burette until a pink color is established; warm the water up to 140°F., dropping in more permanganate if the color disappears; when the temperature reaches 140 remove the lamp, continue to drop in the permanganate till the color is permanent for about ten minutes. Then read off the number of C.C. used, multiply by 0.1 to get the milligrammes of oxygen, and by 4 to get the amount per litre." The amount of oxygen obtained by this process includes that from organic matter and nitrous acid. To separate these we must drive off the nitrous acid by boiling with sulphuric acid as follows:

Take 250 C.C. of the water under examination; add 5 C.C. of dilute sulphuric acid as before; boil briskly for 20 minutes, then allow it to cool down to 140°F., add the permanganate solution until a pink color remains for ten minutes; then calculate as before. The result in this case must be stated as milligrammes per litre of oxidizable organic matter, or organic oxygen.

Nitrous acid is now easily determined, for it is represented by the difference between the two preceding processes. Each milligramme of oxygen is equivalent to 2.875 milligrammes of nitrous acid; the difference must, therefore, be multiplied by this factor, and the result is nitrous acid in milligrammes per litre. From the foregoing tests we can gain sufficient evidence to form an opinion of the character of a given sample of water. The inference from this evidence can be drawn as follows:

A large quantity of nitric and nitrous acids, much oxidizable and nitrogenous organic matter with much chlorine, indicates recent sewage impregnation. With little oxidizable organic matter and nitric acid in large amount, we assume that more or less complete conversion of organic matter has taken place. Albuminoid ammonia and nitric acid in abundance and free ammonia and chlorine in small amount, is indicative of vegetable con-

tamination. Little chlorine with much albuminoid and free ammonia, nitrous and nitric acids, show contamination from gaseous emanations.

To those who have not the inclination or the opportunity to carry out an analysis such as I have described, a few ready tests may be useful. Any druggist can prepare from the formulæ already given the following solutions: Nitrate of silver, Nessler's solution, solution of permanganate of potassium, and solution of iodide of potassium and starch. Provided with these they can proceed as follows:

1. Observe the color.
2. Observe the smell, particularly when the water is boiling.
3. The taste.
4. Add to a small quantity of the water in a test tube or wine-glass, a little of the solution of nitrate of silver. If it gives a white color it contains chlorides. This is a very suspicious sign.
5. To another portion of the water add a small quantity of Nessler's solution. A yellow color or yellowish-brown precipitate shows the presence of *ammonia*.
6. Add a few drops of the solution of permanganate of potassium. The pink color remains if the water is pure, it disappears if the water contains organic matter.

These simple tests would, in most cases, settle the question of the purity or impurity of a suspected water. The amount of disease and suffering caused by the use of impure water, is in this country assuming terrible proportions. Epidemics of typhoid and other zymotics are constantly occurring, which could be easily prevented by a little care in examining the waters and discontinuing the use of impure wells. This is one of the evils arising from the want of Public Health legislation. Surely the day is near at hand when the Government will protect the lives of our people from this, as it does from other forms of poisoning, and furnish us with the means whereby we can control the causes of preventable diseases. Then shall we gain a happy victory over those dread enemies which year by year destroy the lives and desolate the homes of so many of the brave sons and daughters of this prosperous Dominion.

NOTE.—For the processes in the qualitative and quantitative analyses, I have drawn freely from the works of Parkes and Wanklyn, to which I refer the reader who wishes to gain familiarity with this very necessary branch of medical study.

CASE OF ADDISON'S DISEASE.

BY E. GOODMAN, M.D., ST. CATHARINES, ONT.

Having recently had an opportunity of witnessing the closing scenes in the life of a patient who has just died from the rare and obscure disease named after Dr. Addison, it has occurred to me that a brief report of the history, symptoms, and *post mortem* appearances might prove interesting to the members of the profession. I have, therefore, decided to communicate to you the salient points of the case for publication:

Robert L—, the victim of the disease, was about 26 years old at the time of his death, which occurred on the 27th of July ult. He was a tin-smith "by trade," of regular habits, sober and industrious. He was neither very robust nor very delicate in appearance; rather thin than otherwise, but not unhealthy looking. For many years before the development of the fatal symptoms he had suffered from obstinate constipation, a condition which very generally accompanies irritation of the sympathetic from disease involving any of the abdominal or pelvic viscera. To relieve this trouble he was in the habit of taking heroic doses of *sulphate of magnesia* and other purgatives. Some four or five years ago he purchased from an itinerant vendor of drugs a quack preparation, which he took, and which nearly killed him. It was a drastic "purgative," and produced an attack of enteritis. Under the usual treatment, leeches, opium, fomentations, &c., he recovered, and, so far as I know, did not suffer from any unpleasant sequence in consequence of his indiscretion after the subsidence of the inflammation; unless, indeed, it might have been the cause which ultimately led to the disorganization of the *suprarenal capsules*, by exciting disease in them through disturbance of the circulation, owing to the profound irritation of the sympathetic nerves which constitute so large a portion of the medullary part of the capsules. I lost sight of him after this until the 26th of July, 1881, when I was requested to see him in consultation with the physician in attendance upon him at that time. That gentleman informed me that the case was a very obscure one, and exceedingly difficult to diagnose, and that treatment had very little effect. The patient for the last six months had been failing in strength, and complained of dreadful feelings of prostration, and sinking at the

epigastrium. He said he felt as if he "was going down, down, down." His appetite was craving, almost amounting to bulimia, and yet when he sat down to eat the smell of the viands would so overcome him, that he would frequently faint away and have to be carried out into the open air. For the last six months the skin of his face, neck, and the backs of his hands had a dingy, smoky, lustreless bronze color, more marked at some times than at others, and fading away almost entirely during the last week or two of his illness. At the time of his death the only evidence of the discoloration remaining was on the backs of his hands, and, possibly, in the intestinal walls.

Strange to say, just six months ago, and before the symptoms of the disease which led to his death had become sufficiently developed to attract attention, he had his life insured, being examined and pronounced sound, and an eligible risk. The attending physician informed me that the patient had consulted him some weeks ago in consequence of passing large quantities of urine. The doctor examined the urine and found it perfectly normal as to its constituents, and specific gravity, and he considered it as being merely a case of *diabetes insipidus* depending upon some nervous or digestive functional disturbance. No doubt the increased flow of urine was due to the increase of blood pressure in the renal glomeruli from irritation of the sympathetic vaso-motor ganglia controlling the renal circulation. The patient shortly after the examination of his urine left St. Catharines to undertake certain duties in connection with the "Grimsby Camp Ground," and while there consulted a local practitioner, who suspected from the disturbance of the stomach, and the unaccountable weakness and faintness of which the patient complained, that he was suffering from tape-worm, *tania solium*. As no proper remedies were obtainable at the Camp Ground to eject the supposed intestinal incumbent, Dr. Leitch of this city was written to, and forwarded a mixture containing *extract of malefern and castor oil*. *Ex nihilo, nihil fit*; therefore no tape-worm made its appearance "*per vias rectas*," but, unfortunately, terrible prostration supervened, rendering the patient entirely unfit for duty, and compelling him to return home to his father's house in this city. On his arrival he was seen by two of our local physicians. They did all in their power to relieve the patient, who

appeared to be suffering from some anomalous affection, the symptoms of which were prostration, præcordial distress, nausea, anorexia, and hiccough. There was no pain, no fever, no indication of hepatic, cardiac, renal, cerebral, or intestinal disease, in fact it was impossible to locate the disease in any organ, tissue, or viscus of the body. The extremities were cold,—from contraction of the arterioles owing to vaso-motor irritation (?)—the temperature was normal, the pulse feeble and slow, from stimulation of the inhibitory centres owing to the condition of the mucous lining of the stomach influencing the terminal branches of the Vagi (?), and yet there was nothing definite or demonstrable to account for the great and increasing prostration which was rapidly passing into fatal collapse. The attending physicians, baffled by the extraordinary nature of the affection, inferred from the condition of the stomach, the nausea, hiccough, &c., that the disease *might* be localized in the liver or alimentary canal, and so medication was directed to those quarters; but all without avail, the patient continued to sink lower, and lower still. On the evening of the day before the patient succumbed I was called to see him in consultation. After hearing from the attending physician and the parents the history of the case, it occurred to me that possibly the patient might be suffering from disease of the supra-renal capsules, although up to that time I had not been aware of the existence of any discoloration of the skin. Upon asking the patient's mother if she had at any time observed any peculiar color of the skin on any part of the body, she said, "Yes, for the last six months his face, neck, and the backs of his hands had a dark, smoky look; that she used to think his skin was stained with dirt, and asked him why he did not wash it off?" He replied that he "could not wash it off." The patient himself also told me that he noticed the peculiar color of his skin, but that he could not account for it. He never spoke of it to his medical attendant, as he did not associate it in any way with his failing health and strength. On examining the backs of his hands I noticed the lustreless bronze color, but, strange to say, during the preceding week the natural color seemed to have returned to his face and neck as the symptoms of collapse became more marked; so that seeing him in the evening, by lamp-light, I should not have noticed anything abnormal in the appearance

of the skin if I had not closely examined his hands. His mother told me that during the last six months his face at times was as dark as an Indian's. Since his death a number of his acquaintances have spoken to me concerning his peculiar color. The patient died at 6 o'clock p.m., July the 27th, 1881. He was pulseless for some time prior to his death, and retained his consciousness to the last. His muscular weakness was so great that he could not move hand or foot, and constantly begged to be shifted from side to side, and to have his hands and arms pulled and stretched. His restlessness was distressing in the extreme, and was relieved in a measure by nutritive enemata containing cream, brandy, and McMunn's Elixir Opii. Ingesta by the mouth seemed to increase the præcordial anxiety, and produce hiccough. Strange to say he could always check the hiccough by holding his breath, and when so doing the pulse would vanish at the wrist until he resumed respiration. Twenty hours after death my friend Dr. Leitch, the attending physician and I made a *post mortem* examination of the remains. The body was rather emaciated, but not excessively so. There was no appearance of the bronzing remaining, except upon the backs of the hands. The lungs were healthy. There was slight adhesion between the pulmonary and costal pleuræ near the base of the right lung. The heart was small, but otherwise normal, both as to its walls and valves. There was an *ante-mortem* clot, white, but not very tenacious, filling the cavity of the right ventricle and extending into the pulmonary artery. The formation of this heart-clot was no doubt due to the slowness of the circulation for some time prior to death, and probably accounted for the disappearance of the pulse at the wrists. The liver was normal in size, but rather congested, and exuded dark blood when sliced. The kidneys were normal, but slightly congested; so were the small intestines, with the exception of several *maculae*, like purpuric spots, which seemed to stain the walls of the *jejunum* and *ileum*, and were probably due to the same cause which produced the bronzing of the skin. The large intestines were healthy. There was a small fatty tumor on the upper surface of the liver, not larger than a pea, which could not have produced any symptoms during life. The brain and spinal cord were not examined. *Both supra-renal capsules were extensively diseased.* That on the right side was

converted into a dense fibroid mass, as tough as cartilage, and was much enlarged. The capsule of the left side was still more hypertrophied, and consisted of a caseous substance, rather friable, and studded with calcareous particles in its cortical portion. The medullary portion of the left capsule contained a cyst, lined with a smooth membrane, which had a small quantity of milky-looking, puriform fluid in its interior. A warty excrescence was imbedded in the floor of the cyst about the shape and size of a small-pox pustule. This morbid growth was hard and fibrous, and was pitted on its rounded apex with a depression like a rudimentary nipple. Although up to the present time *morbus Addisonii* has been looked upon as absolutely incurable, if the nature of the malady had been suspected earlier something might possibly have been done to mitigate the sufferings of the patient. As the malady seems mainly to exert its injurious influence on the system through the medium of the solar plexus, splanchnics, and great sympathetic, opium, belladonna, chloroform, nitrite of amyl, or alcohol, or indeed any remedy which would counteract its tendency to morbid contraction of the arterioles might be looked upon as indicated on physiological grounds. The irritation of the nerves of organic life is no doubt due to the morbid process going on in the capsules, and whilst unfortunately no means exist of detecting the disease in its very earliest stages, or of arresting the morbid process, the administration of remedies of the nature indicated, either by the mouth, or by hypodermic injection, would doubtless ameliorate the patient's condition, if they did not cure. If the disease should primarily depend upon affection of the sympathetic ganglia themselves, then, possibly, the *neurasthenia* having been over come, the organic changes produced by the nervous disease might also be put an end to *pari passu*. Doubtless the feeble action of the heart, the *bulimia*, from which at one time the patient suffered, the polyuria, the præcordial distress, and the profound depression, were all due to the persistent irritation set up in the sympathetic ganglia by the capsular disease. The great vascularity of the capsules, and their very abundant innervation from the sympathetic (the cells of the medullary portion of the capsules seeming to be identical with the ganglionic nerve cells), are quite sufficient to account for the fatal results attending their disor-

ganization, without the need of associating as a cause of death a supposed function of removing some element from the blood, the non-removal of which would occasion death by blood-poisoning. Brown-Séquard found that removal of the capsules in the inferior animals occasioned death more rapidly than removal of the kidneys. It would scarcely seem possible that the function of the capsules as blood-glands could be so important as that of the kidneys, and, therefore, if death occurs so rapidly after their removal it must be due to the fatal shock produced by the injury to the great sympathetic through the solar plexus and splanchnics, as the capsules appear to have more intimate vital relations with the nerves of organic life than any other viscus of the body. I have dwelt upon this remarkable association of the ganglionic system of nerves with the capsules, not only on account of its great physiological interest *per se*, but because I conceive that it furnishes a key to the many anomalous symptoms which arise during the existence of the disturbance of the functions of any or all of the abdominal, thoracic, or pelvic viscera, in consequence of the irritation of the sympathetic ganglia, which preside over their organic functions, occasioned thereby. Disease of the supra-renal capsules seems to possess symptoms common to cardiac, hepatic, renal, gastric, intestinal, cerebro-spinal, and ovarian disease, simply because it affects the sympathetic as powerfully as all these disorders combined, and it is only by *excluding* the above-named affections, *in the absence of the bronzing of the skin*, that a differential diagnosis can be arrived at. The absence of jaundice, and the "pearly" conjunctiva excluded hepatic disease; the normal urine, renal disease; auscultation, cardiac and pulmonary disease; absence of affections of sensation or motion, cerebro-spinal disease; palpation, ovarian disease. In conclusion, a thoughtful consideration of the case of Robert L—, points out the necessity of familiarizing ourselves with the latest teachings of physiology and pharmacology, if we would successfully combat the protean forms of nervous disease, manifesting itself in aberrations of motion, sensation, secretion, circulation, and nutrition, and in perversions of the moral and intellectual faculties of the brain.

Correspondence.

INTUSSUSCEPTION—RECOVERY.

To the Editor of the CANADA LANCET.

SIR,—On Saturday, September, 4th, I was called to see a case which appeared to puzzle the attending physician beyond measure. I found upon my arrival a young man æt. 19 in dorsal decubitus, with knees drawn up and complaining of nausea and pain over the abdomen, which was most severe in the ileo-cæcal region. On questioning I learned that no movement of the bowels had taken place for two days previous, although there had been a discharge of blood and mucus. There was great tympanites present, but pressure did not intensify the pain as I expected it would. The pulse was 110, and the temperature nearly normal, and spontaneous vomiting of a brown fluid, having a slightly fæcal odor now occurred. The thirst was intense, but when fluids were swallowed, they were immediately ejected. I ordered ice with better effect, as the vomiting did not occur again. I diagnosed the case to be intussusception; the attending physician coinciding with my opinion. From the symptoms present I resolved to try injections of warm water and turpentine every two hours, and this failing obtain competent surgical aid and perform laparotomy. Next day I again visited the case and was pleasantly surprised to find a marked improvement, the tympanites reduced and gases with an offensive odor escaping although no movement of the bowels had taken place, but he as had not eaten solids for three days this did not cause any fresh alarm. I left the house with directions to continue the injections as before and report to me next day the progress made during the night, when I was still further surprised to hear of marked improvement in every particular, and food was retained. I have not seen him since but keep myself informed each day, and the movement of the bowels is normal. No abdominal tumor could be discovered owing to the excessive tympanites that existed when I first saw the case. My object in reporting this case is simply to shew that surgical interference is not always necessary or justifiable, but had my experience as a surgeon been such that I could have operated myself, I would undoubtedly have done so, and distance from competent aid led me to try the above alter-

native. Hoping that you may consider this worthy a place in your valuable journal.

I remain yours respectfully,

T. R. HOSSIE, M.D.

Gouverneur, N. Y. Sept. 10th 1881.

SPRUCE SHAVING SPLINTS.

To the Editor of the CANADA LANCET.

SIR,—In these progressive times when comfort is the order of the day, I have much pleasure in bringing under the notice of the Association, the application of the "Spruce Shaving Splint" in cases of fractured arm and humerus. In January 1881, I had occasion to use this Splint at a time when no other material could be obtained, and the result was of the most satisfactory character. Such shavings are now used by Mr. Eddy, for the manufacture of ordinary match boxes, and to prevent painted wooden ware, from adhering together, thus I came in contact with the material. By placing 5 or 6 of these shavings together, a splint is at once formed, of great practical utility. In the first place, it possessed lightness; secondly pliability, and thirdly when well padded, it actually hugs the arm, in a manner, superior to any splint, I have had occasion to use, either in hospital, or private practice. Again should the case be one of compound fracture, in which the secretions, rendered it necessary to change the support of the arm, the whole splint, would not require removal, as an outside or inside shaving could at any time, be taken away, without necessarily disturbing the whole arm. In a recent case of dislocation and fracture, at the elbow joint, I was much pleased with the use of this splint, particularly, as to the manner in which it flexed round the posterior part of the joint, the splint in the posterior aspect of the arm, being extended in that direction. Thus the elbow joint was retained in its normal position, with ease and comfort. Of the various forms of timber, spruce, is the only fibre known, which possesses, the requisite pliability and flexibility, to undergo the fine shaving process of manufacture. This has been tested most thoroughly, in the construction of match bones. From the foregoing facts, it appears, that in the "Spruce Shaving Splint," we have an inexpensive, light, pliable and

practical appliance, which will be found of great service either in civil or military practice.

Yours respectfully,

J. A. GRANT.

Ottawa, July, 2nd 1881.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

April 21st, 1881.—The meeting was called to order at 8 p. m. the President Dr. Covernton in the chair. The minutes were read and confirmed.

Dr. Oldright exhibited a placenta with a peculiar attachment of the membranes. Dr. Sheard exhibited a stricture of the sigmoid flexure and rupture of the colon at the junction of the descending and transverse portions. Dr. Riddel exhibited a triangular plate of fish bone, extracted by means of a piece of bellwire from the oesophagus of a lady by whom it had been swallowed. Dr. Ross Jr. related a case of skin disease. Dr. Sheard then read a paper upon the pathology of tubercle. The first portion of his paper dealt with the nature of tubercle, and in it he gave the chief histological characteristics. In the second portion of his paper he discussed the etiology of the disease, describing the results of experiments upon animals, made with a view of artificially producing tubercle. He advanced the view of a preliminary inflammatory action before the deposit of tubercle, exhibiting a human lung, in support of this view, in which the upper part was distinctly tuberculous and the lower part as distinctly in a condition of red hepatization. An interesting discussion followed the reading of the paper.

The nomination of officers for the ensuing year then took place and the meeting adjourned.

May 5th.—After routine Dr. Covernton, the retiring President read his valedictory address in which he reviewed the status of medical men, and said that the public did not always appreciate their efforts; he also touched upon the benefits of Medical Societies, reviewed the work done in the past year, and congratulated the Society upon its flourishing condition.

The election of officers for the ensuing year was then proceeded with, which resulted as follows: Dr. Daniel Clark, President, Dr. Graham 1st Vice-President, Dr. Oldright, 2nd Vice-President, Dr. Macdonald, Treasurer, Dr. Alex. Davidson, Record-

ing Secretary, Dr. Sheard Corresponding Secretary, Drs. A. H. Wright, Lett and Spencer, Councillors,

Dr. Temple exhibited an acephalous monster, and the meeting then adjourned.

May 19th.—The Society met at 8 p.m., the newly elected President in the chair. After the reading of the minutes, and other preliminary business, Dr. Oldright exhibited a bullet, which after passing through several partitions of wood and lath and plaster, had inflicted a cleanly incised wound on a child's head.

Dr. Cameron, related a case of a cherry stone being extruded from an aged person's nose, he could not say how it had got there or how long it had been there, but the patient affirmed that she had not eaten cherries since last November.

Dr. Riddel related a case of confinement in which when he was about to relieve retention of the urine by the catheter he discovered two large chancres on the labia pudendi.

Dr. Oldright made reference to the painful interest the Society would take in hearing of the illness of Dr. DeGrassi and Dr. McPhedrain; the same gentleman also referred to the case of a little girl two and half years old, in which there existed an abdominal tumor principally occupying the right side, it was rapid in its growth, elastic to the touch, but when aspirated it gave no evidence of its being a fluid tumor, a small quantity of fluid withdrawn in the aspirator needle and examined microscopically did not give any evidence of malignancy. Dr. Workman mentioned a similar case which proved to be malignant.

Dr. Riddel read an article upon the career of Dr. Tumblety, "The Indian herb Doctor," which dilated upon his wonderful cures and his wholesale quackery, after which the Society then adjourned.

June 30th.—The Society met at 8 o'clock, the President in the chair, the minutes of the previous meeting were read and adopted. Dr. King was then proposed a member of the Society.

Dr. Sheard exhibited the lungs, liver and kidneys taken from a person the subject of syphilis; the liver contained abscess cavities. The lungs were tuberculous and the kidneys showed, desquamation of the uriniferous tubes.

Dr. Cameron exhibited a thrombus of the longitudinal sinus taken from a child seven months old,

he also exhibited the cerebral vessels taken from the same case, with masses attached to them which he took to be syphilitic gummata; the same gentleman also exhibited a portion of a tibia which had been spontaneously amputated at the seat of a malignant ulcer.

Dr. Riddel then related a case of miscarriage at the seventh month, followed by septicæmia, the foetus being a monstrosity.

Dr. Graham, then read a very excellent and exhaustive paper upon leucocythæmia, in which he related the histories of two cases which he had recently had under his observation, at the Toronto General Hospital, the first case being that of the lymphatic variety, and the second case being that of the splenic variety, he also referred to the myelogenous form, a very rare variety of leucocythæmia. The disease seemed to baffle all treatment, and progressed slowly and surely to a fatal termination, the only treatment thought to be beneficial would be prophylaxis, could the cause of the disease be once arrived at; chaulmoogra oil was tried but with no benefit. The reader while he drew a difference between leucocythæmia, and Hodgkin's disease, thought that the disease under consideration and the so-called malignant, growths were related to one another. In concluding his paper Dr. Graham ventured the following opinion.

1st. That the essential features of leucocythæmia are lymphoid deposits, and leucocytes derived from them.

2nd. Similar growths are the features of Hodgkin's disease, but the cells do not enter the circulation.

3rd. That in both diseases the presence of these deposits interferes with the manufacture of the red blood corpuscle, producing anæmia.

4th. That these growths bear a strong relation to malignant growths, especially sarcomata.

5th. That Progressive Pernicious anæmia may arise as a consequence of leucocythæmia or Hodgkin's disease, in the same way that it may follow pregnancy or any other disease which interferes with the proper elaboration of the blood.

The discussion on Dr. Graham's paper was deferred to the next meeting of the Society owing to the lateness of the hour.

The Treasurer, Dr. Macdonald, then read his report for the bye-gone year which showed the Society to be in a very flourishing condition.

Selected Articles.

INTERNATIONAL MEDICAL CONGRESS.

ADDRESS BY THE PRESIDENT, SIR JAMES
PAGET, BART.

We are indebted to the N. Y. Med. Record for the following Reports:—

After referring to the composition of the Congress, the diverse characters of its members, and the various methods of study which had gained eminence for each, he dwelt upon the necessity of utilizing the apparent diversity of thought into a concentrated and harmonious whole. In works done by dissimilar and independent minds, dispersed in different fields of study, or only gathered into self-assorted groups, there was apt to be discord and great waste of power. There was, therefore, need that the workers should from time to time be brought to some consent and unity of purpose; that they should have opportunity for conference and mutual criticism, for mutual help and the tests of free discussion. This it was which, on the largest scale and most effectually, the Congress might achieve; not, indeed, by striving after a useless and happily impossible uniformity of mind or method, but by diminishing the lesser evil of waste and discord which was attached to the far greater good of diversity and independence. Now, as in numbers and variety the Congress might represent the whole multitude of workers everywhere dispersed, so in its gathering and concord it might represent a common consent that, though apart and different, yet the work was and should be essentially one; in all its parts mutually dependent, mutually helpful—in no part complete or self-sufficient. It might seem to be a denial of the declaration of unity that, after this general meeting the Congress should separate into sections more numerous than on any former occasion. He would speak of these sections to defend them; for some had maintained that, in such a division of studies, there was a mischievous dispersion of forces. He observed that the sections which we have instituted are only some of those which are already recognized, in many countries, in separate societies, each of which has its own place and rules of self-government, and its own literature. And the division had taken place naturally, in the course of events which could not be hindered. For the partial separation of medicine, first from the other natural sciences, and now into sections of its own, had been due to the increase of knowledge being far greater than the increase of individual mental power. He did not doubt that the average mental power constantly increased in the successive generations of all well-trained peoples; but it did not increase so fast as knowledge does, and thus, in

every science, a small portion of the whole sum of knowledge had become as much as even a large mind can hold and duly cultivate. Many of us might, for practical life, have a fair acquaintance with many parts of our science, but none can hold it all; and for complete knowledge, or for research, or for safely thinking out beyond what was known, no one could hope for success unless by limiting himself within the few divisions of the science for which, by nature or by education, he was best fitted. Thus, the division into sections was only an instance of that division of labor which, in every prosperous nation, we see in every field of active life, and which was always justified by more work better done. Moreover, it could not be said that in any of our sections there was not enough for a full strong mind to do. If any one doubted this, he might try his own strength in the discussions of several of them. In truth, the fault of specialism was not in narrowness, but in the shallowness and the belief in self-sufficiency with which it was apt to be associated. If the field of any specialty in science was narrow, it could be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, might reach the richest stores of wealth and find use for all the appliances of scientific art. Not in medicine alone, but in every department of knowledge some of the grandest results of research and of learning, broad and deep, were to be found in monographs on subjects that, to the common mind, seemed small and trivial.

Study in such a Congress might be a useful remedy for self-sufficiency. Here every group might find a rare occasion, not only for an opportune assertion of the supreme excellence of its own range and mode of study, but for the observation of the work of every other. Each section might show that its own facts must be deemed sure, and that by them every suggestion from without must be tested; but each might learn to doubt every inference of its own which was not consistent with the facts or reasonable beliefs of others; each might observe how much there was in the knowledge of others which should be mingled with its own; and the sum of all might be the wholesome conviction of all, that we cannot justly estimate the value of a doctrine in one part of our science till it has been tried in many or in all. The test of truth in every part should be in the patient and impartial trial of its adjustment with what was true in every other. For every fact in science, wherever gathered, had not only a present value, which we might be able to estimate, but a living and germinal power of which none could guess the issue. It would be difficult to think of anything that seemed less likely to acquire practical utility than those researches of the few naturalists who, from Leeuwenhoeck to Ehrenberg, had studied the most minute of living things, the vibrionidæ. Men boasting themselves

as practical might ask, "What good can come of it?" Time and scientific industry had answered, "This good: those researches had given a truer form to one of the most important practical doctrines of organic chemistry; they had introduced a great beneficial change in the most practical part of surgery; they were leading to one as great in the practice of medicine; they concerned the highest interests of agriculture, and their power is not yet exhausted." And as practical men were, in this instance, incompetent judges of the value of scientific facts, so were men of science at fault when they missed the discovery of anæsthetics. Year after year the influences of laughing-gas and of ether were shown: the one fell to the level of the wonders displayed by itinerant lecturers, students made fun with the other; they were the merest practical men, men looking for nothing but what might be straightway useful, who made the great discovery which had borne fruit not only in the mitigation of suffering, but in a wide range of physiological science.

The history of science had many similar facts, and they might teach that any man would be both wise and dutiful if he would patiently and thoughtfully do the best he could in the field of work in which, whether by choice or chance, his lot had been cast.

The best work of the International Congress was in the clearing and strengthening of the knowledge of realities; in bringing, year after year, all its force of numbers and varieties of minds to press forward the completion as might from year to year be possible. Thus, chiefly, the Congress might maintain and invigorate the life of our science. And the progress of science must be as that of life. It sounded well to speak of the temple of science and of building and crowning the edifice. But the body of science was not as any dead thing of human work, however beautiful; it was as something living, capable of development and a better growth in every part. For as in all life the attainment of the highest condition was only possible through the timely passing-by of the less good, that it might be replaced by the better, so was it in science. As time passed, that which seemed true and was very good became relatively imperfect truth, and the truth more nearly perfect took its place. In the certainty of this progress, the great question was, What should we contribute to it? It would not be easy to match the recent past. The advance of medical knowledge within one's memory was amazing, whether reckoned in the wonders of the science not yet applied, or in practical results in the general lengthening of life, or, which was still better, in the prevention and decrease of pain and misery, and in the increase of working power. He could not count or recount all that in this time had been done; and he supposed there were very few, if any, who could justly tell whether the progress

of medicine had been equal to that of any other great branch of knowledge during the same time. He believed it had been; he knew that the same rate of progress could not be maintained without the constant and wise work of thousands of good intellects; and the mere maintenance of the same rate was not enough, for the rate of the progress of science should constantly increase. That in the last fifty years was at least twice as great as that in the previous fifty. What would it be in the next, or, for a more useful question, What should we contribute to it?

"In the number and intensity of the questions brought before us," said he, "we may see something of our responsibility. If we could gather into thought the amounts of misery or happiness, of helplessness or of power for work, which may depend on the answers to all the questions that will come before us, this might be a measure of our responsibility. But we cannot count it; let us imagine it; we cannot even in imagination exaggerate it. Let us bear it always in our mind, and remind ourselves that our responsibility will constantly increase. For, as men became in the best sense better educated, and the influence of scientific knowledge on their moral and social state increases, so, among all sciences there is none of which the influence and, therefore, the responsibility will increase more than ours; because none more intimately concerns man's happiness and working power.

"But, more clearly in the recollections of the Congress, we may be reminded that in our science there may be, or, rather, there really is, a complete community of interest among men of all nations. On all the questions before us we can differ, discuss, dispute, and stand in earnest rivalry; but all consistently with friendship, all with readiness to wait patiently till more knowledge shall decide which is in the right. Let us resolutely hold to this when we are apart; let our internationality be a clear, abiding sentiment, to be, as now, declared and celebrated at appointed times, but never to be forgotten; we may, perhaps, help to gain a new honor for science if we thus suggest that in many more things, if they were as deeply and dispassionately studied, there might be found the same complete identity of international interests as in ours.

"And then, let us always remind ourselves of the nobility of our calling. I dare to claim for it, that among all the sciences, ours, in the pursuit and use of truth, offers the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility, and charity. These three, which are sometimes in so lamentable disunion, as in the attractions of novelty without either utility or charity, are in our researches so combined that, unless by force or wilful wrong, they can hardly be put asunder. And each of them is admirable in

its kind. For in every search for truth we can not only exercise curiosity, and have the delight—the really elemental happiness—of watching the unveiling of a mystery, but, on the way to truth, if we look well round us, we shall see that we are passing among wonders more than the eye or mind can fully apprehend. And as one of the perfections of nature is that, in all her works, wonder is harmonized with utility, so is it with our science. In every truth attained there is utility either at hand or among the certainties of the future. And this utility is not selfish: it is not in any degree correlative with money-making; it may generally be estimated in the welfare of others better than in our own. Some of us may, indeed, make money and grow rich; but many of those that minister even to the follies and vices of mankind can make much more money than we. In all things costly and vainglorious they would far surpass us if we would compete with them. We had better not compete where wealth is the highest evidence of success; we can compete with the world in the nobler ambition of being counted among the learned and the good who strive to make the future better and happier than the past. And to this we shall attain if we will remind ourselves that, as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth utility, so in every use of it there may be charity. I do not mean only the charity which is in hospitals or in the service of the poor, great as is the privilege of our calling in that we may be its chief ministers; but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion. And it is surely fair to hold that, as in every search for knowledge we may strengthen our intellectual power, so in every practical employment of it we may, if we will, improve our moral nature; we may obey the whole law of Christian love, we may illustrate the highest induction of scientific philanthropy.

“Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work.”

ADDRESS BY PROFESSOR VIRCHOW.

Professor Virchow, of Berlin, delivered an address, in German, on the value of experimental pathology. He commenced by referring to the great activity of the anti-vivisectionists, and the harm they had done to experimental physiology and pathology. The latter, as well as the former, had its claims for defence from all scientific men. In connection with the general subject, he proceeded to examine the decline of the science of symptoms, and of the falling off of an interest in the study of their relations to pathology. Were symptoms no longer to possess any significance for the medical man?

He would say certainly not. At the same time, for the scientific medical man, symptoms were only the expression of a hidden force, it was his business to follow up this hidden force to its seat in the human system, and there learn its nature and causes. The first question of the pathologist, as of the biologist, was, Where? Consequently, whether they probed the seat of disease with the anatomical knife, or whether they merely confined themselves to observation, the mode of proceeding was essentially anatomical. It was the recognition of this principle which, in a few decades, had changed the whole face of science. Especially was this change observable in the treatment of ophthalmic diseases. Every practitioner now studied the seat of the evil itself, and not merely its symptoms. Even the anti-vivisectionists recognized the value of this method, forgetting, however, that every organ of the body was not so favorably situated for observation as the eye. The principle of modern medicine, in a word, was that of localization. Vivisection dated really from the time of Harvey. Now, Harvey's services the strongest opponents of vivisection themselves recognized; but, said they, since Harvey's time vivisection has revealed nothing important. They were not aware that that very element in the phenomena of Harvey's circulation of the blood, which most affected the vital attributes of the organs of circulation, remained untouched. Whence was derived the activity of the heart? What part in the motion and the distribution of the blood did the organs of the body play? What share devolved upon the arteries, the veins, and the capillary vessels? All those questions were of the highest practical importance, and none of them could be solved otherwise than by experiments upon living animals. Those questions Harvey could not settle, because, in his time, higher anatomy had not been developed. Who then knew anything of the heart or of the nerves? Not till these latter days did men understand the peculiarities of the circulation of the blood. The pulse, that highly-prized object of the old symptomatology, was now intelligible. It was no longer regarded as presenting the symptom of this or that disease, but as the sign of the existence or non-existence of certain principles of activity, of the strength or the weakness, the irritation or the relaxation of certain tissues. The development of physiology and pathology paved the way for the later experimenters, and accounted for the long interval which had elapsed since Harvey's time. Our modern science, indeed, had been but of slow growth, but as it grew, one thing became clearer and clearer—namely, the principle of inherent vitality—the *vita propria* of each section of the body (*das Eigenleben der Theile*). Every step showed more conclusively that the supposed existence of life, as a large and separate entity, was a fiction. Life existed everywhere in the body; and disease

and life—or, to speak more properly, diseased and healthy life—existed perfectly well side by side, in the sense that disease indicated so much abstracted from the healthy life. Disease, in fact, was no longer spiritualized: it was a material entity, a real living thing, a cellular change (*die veränderte Zelle*). Had all these discoveries resulted in tangible advantage to us? Was it worth while for such results that so many animals should suffer pain and death? The questions he could confidently answer in the affirmative. How, he asked, could further important results in the science of healing be looked for, if experiments with animals were prohibited? How else, for instance, could the operation of chloral have been discovered? It could not seriously be expected that medical men should make their own bodies the subject of experiments with very various and perhaps poisonous substances. They were already more exposed to danger in their contact with disease than any other class of the population. If no suffering whatever was to be inflicted upon animals, our social habits in relation to horses, dogs, etc., would be very much altered. It was absurd to contend, as the vivisectionists did, in effect, that suffering was worse than death. There was no greater hardship involved in putting animals to death, in order to promote the public welfare by means of scientific experiment, than in killing them for food. Abuses, of course, he did not defend, but so long as every person who owned an animal had the right of killing it, necessarily it followed that scientific experiments involving the death of animals were justifiable. And of the necessity of these experiments, and the mode of carrying them out, the investigator alone could be the judge, though, as to the question of time and place, a judicial authority might fairly have something to say.

At the conclusion of his address, which lasted over an hour, and which, marked as it was by many gleams of humor and passages of eloquence, evoked much applause, the learned Professor pleaded that vivisectionists should not be regarded as heartless barbarians, but as men who were working to promote the welfare of humanity. Of science it might be said, as Bacon said of the sun—"Palatia et cloacas ingreditur, neque tamen polluitur."

CASES IN HOSPITAL PRACTICE.

CLINIC BY AUSTIN FLINT, M.D., NEW YORK.

Cirrhotic Liver.

This specimen was taken from the woman who was shown you at a former clinic, and represents the gross appearance of a cirrhotic liver. It is very much contracted, and presents the hob-nailed

appearance in a very marked degree. I will only say, regarding the case, that the patient was tapped several times for abdominal fluid distention, which gave marked relief, and probably prolonged life. She gradually failed, however, lost her appetite, and died of exhaustion. When the autopsy was made, the liver weighed thirty ounces, the normal weight of the liver being about four and a half pounds.

The next cases that I shall present to you, gentlemen, are examples of a disease which I leave for my colleague, Dr. Janeway, to lecture upon. But as there is no didactic course at present, I will make some remarks upon these cases. The history of the first patient reads as follows:—

Aphasia.

David —, fifty-five years of age, a laborer, a native of Ireland, admitted on the eighth of this month. He has been for years a hard drinker, frequently going off on a prolonged debauch, and being drunk most of the time for a month or two. About six weeks ago he was suddenly taken with convulsions, grew black in the face, foamed at the mouth, worked the legs and arms, and then lay in an unconscious state for several hours. His condition gradually improved, and after four or five days he went to work again. Two weeks ago he was attacked in a similar manner, and when consciousness returned it was found that he could not speak, and that his right side was paralyzed. Since then he has been lying in a stupid condition, unable to speak, with but slight power of motion, and rejecting all food. That was the history obtained when he entered, on the eighth instant. On his admission no history could be obtained from him. He had aphasia; was stupid; the pupils were normal; there was no paralysis, no cardiac affection; the arteries were atheromatous. The arteries now feel like a tube composed of hard rings. On the 10th he was a little less stupid, and, although articulation is difficult, he can speak a few words. He takes food much better. The urine is albuminous, but no casts have yet been found, of normal specific gravity.

This, then, is a case of aphasia, connected with paralysis of the right side. These attacks of epileptoid convulsions were very probably due to the excessive use of alcohol, although there is ground for strong suspicion that there exists renal disease. I do not think it is possible, from what data we have, to decide whether the coma and convulsions were alcoholic or uræmic; there may have been a mixture of both. He has recovered from the paralysis, so that we may conclude that there was no extravasation of blood; there was either thrombosis or embolism, not sufficient to produce any persistent obstruction.

Now, in regard to the aphasia, of which I wish to speak in connection with this and another case;

the patient is now able to speak, but how much it is difficult to tell, for he was and is stupid, his general mental faculties being oppressed. Before making further remarks, I will bring in the next patient.

No previous history was obtained of this patient, but he has a pulmonary affection, and when he entered the hospital, about three months ago, he had complete aphasia, and paralysis of the right side of the face. You notice that to-day there is scarcely any paralysis of the face, and that he can speak, although he uses words with difficulty, and sometimes uses wrong ones. He has, then, paraphasia.

I will present some general remarks in connection with these two cases, but have not time to go fully into the subject of aphasia. We mean by aphasia the loss of speech, in contradistinction to the loss of voice, which is aphonia. As a rule, aphasia occurs in connection with right-sided paralysis or hemiplegia. With few exceptions the paralysis is on the right side. The cerebral lesion, of course, being on the left side. But we sometimes meet with aphasia, as in this case, without any paralysis of the extremities; there is no evidence that this patient had any paralysis of the upper or lower limbs, but, as you see, he has some paralysis of the facial muscles. We may have aphasia, however, without any motor paralysis. We occasionally meet with cases of that kind. Aphasia has given rise to a good deal of observation and discussion within the past few years, and it still opens a field for discussion, and further investigations are very much to be desired. We have come to know that, in a large proportion of cases of aphasia, a lesion of some kind exists in the left anterior portion of the cerebrum, in the neighborhood of the island of Reil, and more especially in the posterior part of the third frontal convolution. Now, we may assume that this localization is the rule, but with some exceptions. In some exceptional instances the lesion is similarly located on the right side, giving rise to left hemiplegia; and in some instances, as stated, the lesions are found elsewhere, while the situation in which lesions are usually found is free from lesions. There is always some room for doubt in regard to the latter part of the statement, because there may be lesions which may escape attention unless very close examination be made, and perhaps the closest examination may fail to discover a lesion which does exist.

Now, when we come to the symptom, we find that it differs in different cases, and there are different varieties of aphasia, and some writers, especially the author on that subject in Ziemssens' *Cyclopedia*, go very much into refinements, in some of which I do not see any practical advantage. But some distinctions are obvious and important. There is one variety of aphasia in

which the patient has evidently in mind the appropriate words for expressing the idea; that is, there is no lack of the symbols of ideas which language furnishes in the mind of the patient, but the patient cannot give utterance to those words. The words are in the mind, but they cannot be conveyed by speech. And when this kind of aphasia is complete the patient is perfectly mute, and says nothing, and makes no effort to say anything. That is known as ataxic aphasia, but it is not a proper term, for ataxic means a lack of coördinating power in the muscles, but the patient does not move the muscles at all. You cannot compare it with a case of locomotor-ataxia, in which the patient uses the muscles, but does not use them right. As just said, in this so-called ataxic aphasia there is no effort to use the muscles. Exactly what the nature of the difficulty is, it is difficult to say. But we see the character of the difficulty; the patient cannot give utterance to the words which are in his mind, to express his ideas. That the words are in his mind is evidenced by the fact that he can write them. He knows and understands the words, but cannot give utterance to them.

Then, there is another variety of aphasia known as amnesic aphasia, in which the patient cannot communicate the words expressing ideas, either orally or by writing. This implies a greater aphasic effect than the other. There is still another, in which the patient cannot communicate his ideas by signs, and he does not understand words when spoken to him. Here we have a combination of the different varieties. But in this latter case it seems to me clear enough that there is a condition of mental imbecility. A pretty important conclusion, if true; although I would not say that the patient must necessarily be altogether without intelligence, like an idiot. The difficulty involved carries with it a certain grade of insanity, so that the patient is not accountable for acts. But in ataxic aphasia there is every reason to believe that the patient may preserve the intellectual faculties intact, being capable of performing important acts which shall stand in law, such as the making of a sale, transferring property, and so on. That is a question of much interest and importance when made the occasion of very important medico-legal investigation.

Then, there is another form still, in which the patient has not lost the power of endeavoring to express words by speech, but there is not the command of words which the patient wishes to use to express ideas. He uses wrong words, as this second patient does; although he has improved to a certain extent, he uses wrong words, paraphasia, as it is called. Such a patient seems, sometimes, to have clear enough ideas in the mind, but when he attempts to convey them he uses language which conveys to the listener no apprehension of the ideas which he wishes to express. I have been

for several days seeing a patient who has this form of aphasia. There was a little paralysis of the right side, perhaps a little now, but it is very slight. That patient, whenever I see him, endeavors with the greatest possible earnestness to try to express something to me, but he uses incoherent words; his speech is a jumble of words, so that one cannot form the least idea, from the words he uses, of the ideas which he wishes to convey, and that fact gives him, as it is apt to do patients who retain their intellectual faculties more or less complete, an intense feeling of chagrin, so that after talking that way for a while he becomes almost wild with a feeling of irritation. Paraphasia is the proper name for it. In a practical view this is probably a sufficiently comprehensive representation of this symptom.

Now, these forms of aphasia depend upon the different causes which may give rise to paralysis; and aphasia usually, but as I have stated, not invariably, is associated with paralysis. These different conditions are: Extravasation of blood, and the formation of a coagulum within the brain, thrombosis, the obstruction of an artery by the conveyance to it and lodgment in it of a clot from the heart, embolus. These are the three causes which stand in relation to the aphasia and the paralysis in the great majority of cases; but other lesions of the brain may be the cause, such as a syphilitic growth, and tumors of different kinds, etc.; but I repeat that, in the great majority of cases, when we come to the question of pathological condition, we have to decide between extravasation of blood, thrombosis and embolism. I would take up some differential points, etc., but we have not time to-day.—*Med. and Surg. Reporter.*

ABDOMINAL SURGERY AND LISTERISM.

The three topics of interest in the Surgical section of the International Medical Congress were Abdominal Surgery, "Intra Peritoneal," the programme had it, Modern Lithotripsy,—they would say "Litholapaxy" over here,—and the Treatment of Wounds to secure Union by First Intention.

I may say parenthetically that the mode of procedure was for some one, or more, who had previously promised it, to read a paper upon the subject, and the discussion of those papers was taken up by the gentlemen appointed for that duty, whose names were printed upon the programme, and who were called in regular order by the president. And I may also say, right here, that every delegate was anxious to ascertain the exact position of "Listerism" in the convention. It was noticeable that early in the sessions when certain men, who shall be nameless, *seemed* to try to test the matter by initiating applause at every allusion to antiseptic surgery there was very little response.

Mr. Lister himself was always and everywhere heartily received. But it required no great sagacity to see that the majority of surgeons were *reserved* in the matter. But more of this further on.

Spencer Wells read a paper. He took strong Listerian ground, and said that now he had given up drainage altogether, so great was his faith in antiseptic surgery. Several others, Volkmann especially, followed in a similar strain. Then Marion Sims arose, and while he declared for Listerism he advocated drainage, and reminded Mr. Wells of a case (ovariotomy), in which he assisted him in a bad operation,—bad on account of adhesions,—and the patient *almost* died, but at last nature opened the abdominal wound and discharged a large amount of fetid fluid, and immediately she recovered. Finally came Mr. Keith to close the discussion. Never in the history of surgery did a few modest words make such a recoil in the "currents of expectant thought" as his.

It has been said, and was repeated by Volkmann and Kuget, in this discussion, that intra-peritoneal surgery was the "touchstone of Listerism." Professor Keith has been quoted the world over, again and again, as not only a warm disciple of Lister, but as illustrating in his remarkable success in ovariotomy, *more than any other surgeon*, the value of the antiseptic, or rather, the Listerian method. No one can deny this.

So slowly were his few words uttered that I can almost repeat every one *verbatim*.

You can imagine the effect much better than I can describe it when he said that for several months past he had "abandoned the antiseptic treatment altogether." "True," he said, "I had eighty successive recoveries under Lister's method, and *stopping there* it would be a wonderful showing. *But out of the next twenty-five I lost seven.* One died of acute septicæmia, in spite of the most thorough antiseptic precaution; three of "unquestionable carbolic acid poisoning; one of renal hæmorrhage." He went on to say that out of the eighty consecutive cases (or rather he said it first) many came too near dying; that a large number got a high temperature—105°, 106°, 107° Fahrenheit—the evening following the operation, but he said, "they happened to pull through." He then said that since he had for four months past abandoned the antiseptic method, and relied upon perfect cleanliness, care in controlling hæmorrhage, and thorough drainage, his cases were giving him much less trouble, and he was getting more satisfactory results.

He now stopped for a few moments, hesitating, as he must have realized the importance of his words, knowing that the whole world—surgical—was lending a "listening ear" to his utterance. The silence was "audible." Then he raised his head, and looking his audience squarely in the face, he said, "Gentlemen, I have felt it my duty

to make these statements, for *they are true*," and took his seat. I shall not attempt to describe the applause, nor the effect of his statements. Professor Keith, by the way, told me privately that he almost died himself from using the carbolic acid so much. He got renal hæmorrhage and debility to an alarming degree. He said, moreover, that he never had great faith in it, and should not have continued its use so long—I mean the "Lister method"—but for the fact that so many eminent men were carried away with it; and if, after his remarkable series of cases, he had changed, and lost seven out of twenty-five, as he did, without Listerism, all the world—he himself—would have attributed the result to the change.

One thing is certain: Mr. Keith's statements, in connection with those of others *and his own experience*, put Mr. Lister in a very unpleasant position; for he was put down on the programme to close the discussion on the treatment of wounds to secure union by first intention, which took place on Monday, 8th inst. Although four days had elapsed, he had no answer. To show how deeply he was impressed by all that had been said, he began his remarks, which were extemporaneous instead of written, as was expected, by saying that he never had admitted that abdominal surgery was the "touchstone of Listerism," and to the surprise and dismay of his followers went on to argue that, with the rapidity with which wounds of the peritoneum heal and the remarkable absorbing power of that membrane, and therefore its ability to take care of its exudates, he "doubted very much" whether, in the hands of a skillful, careful operator, it was not better to dispense with the antiseptic plan. I realize how important are the statements I am making, and lest some of your readers may think that they are open to criticism as to accuracy, I will say that I sat near enough to hear every syllable uttered, and I pledge my honor as a man and surgeon for the absolute accuracy of every statement, though I took few notes.

Then, seeming to realize the danger of admitting such wonderful absorbent qualities to the peritoneum, he went on to say that he had recently made some experiments that surprised him very much, which proved that serum or bloody serum was "a very poor soil for the development of germs from contract with air-dust, and that blood clots were still more sterile. Indeed, it was very difficult to make them grow or develop at all, unless diluted with water." By the way, he declared that he had witnessed free cell development in a blood clot.

And these remarkable facts, said he, "at once call in question the necessity of the spray."

He then went on to say that he was not yet ready to give up the spray, but if simple irrigation or lavation should prove as good, he would say, "*Fort mit dem spray*," and he further said, "I am

not at all sure but that before the next meeting, two years hence, I shall have abandoned the spray altogether." (His recent house surgeon says that he has lost all confidence in its utility.)

As to carbolic acid, he said, "I am forced to admit its unfortunate character." That was all; not a word about oil of eucalyptus or any other substitute. He kept referring again and again to abdominal surgery, but his manner showed to everybody that he was upset.

He gave no statistics, no large comparisons, as was expected by his disciples. He referred to the excellent results in two cases of recent operation, saying that "I could hardly believe I should have got such results without the antiseptic plan; I did not before I used it."

And this is the fault that the best surgeons here find with him. They are all ready and glad to give him or any other man credit for all he has really done, and they all admit that Mr. Lister has done much to improve surgery, especially German surgery. I need not explain. But they very properly say, "With his unprecedented opportunities, both in his host of followers, why don't he give us large and complete statistics? Instead, he only gives either isolated cases or a small group of successful ones, such as may be found under almost any plan." I quote one of London's most eminent and fair-minded men.

It was curious to watch the effect of the thing. I have alluded to the impression produced by Keith's remarks. As Lister was speaking, one of his ardent admirers—I mean an admirer of his mode of dressing; I am not discussing the man, who is an earnest hard-working, accomplished gentleman—turned to me, and said, I would never have believed Professor Lister would have admitted that." Another said, "Well, if Lister abandons the spray and carbolic acid giving us no substitute, where is 'Listerism?' We had drainage, we had animal ligatures, we had air-proof dressings, before." And so on. Every little group of surgeons was discussing the matter; those who had never accepted the Listerian method being quite as much surprised as its warmest adherents.

"Mein Gott!" said a German whom I did not know, "Listerism ist todt." "Fort dem Spray? Fort dem Acid Carbolique? Was giebt's zu bleiben?"—*Boston Medical Journal*.

RELATION OF ULCERATED OS TO PREGNANCY.

Dr. J. H. Bennett, narrates this case in the *British Medical Journal*, (*Med. and Surg. Reporter*):

I was applied to in February, by a Polish lady, "to bring on abortion." She was thirty-six years of age, the mother of several children, and had

nearly lost her life a year before, at Warsaw, from uncontrollable sickness and constant and profuse hemorrhage, during pregnancy. She had the best consulting advice to be obtained at Warsaw; and, after every ordinary means had been tried in vain, abortion was induced, at the end of the sixth month, to save her life, as she was rapidly sinking. She came south, partly to recruit. When she sent for me, she considered herself about three months gone, and had had bleeding for a month. Latterly, the loss had been hemorrhage, and she was becoming anæmic. There was constant sickness, and she was blanched and weak. All these facts were placed before me by her relatives, and my assistance demanded on the lines laid down by her previous Warsaw physicians. I refused to accede to the request until I had ascertained that such a course was imperatively necessary, demanding an examination. This was allowed; and I found a hypertrophied cervix, with fungoid bleeding ulceration. These lesions were treated as described. In a fortnight, the bleeding ceased entirely; in less than a month the sickness had ceased; and in two she was quite well and in a fair general health—five months gone in a then all but normal pregnancy; the fœtus vigorous. She left me to go home, in this, state in April, and has since been happily confined of a live, healthy child. Her obstetric physicians at home were much surprised at the treatment of her case, and at the results.

The existence of inflammatory lesion of the cervix or uterus, at the time of parturition, does not give the accoucheur any particular clue for any special treatment; but it prepares him for accidents. He should know that he has a bad case in hand; that rigidity of the os; slow, painful labor; laceration of the cervix; hemorrhage, during or after parturition; adherent placenta; metritis; ovaritis; hemorrhagic; purulent; long-continued lochial discharges; in a word, a bad labor and a bad getting up may be expected, in the natural course of things.

Such woman often do well, however, for two or three weeks after their confinement, and then flag, and become weak, feverish, and ill. Six weeks or two months after their confinement, their uterine condition should be carefully investigated; and, if any disease exist, it should be treated and cured before they are restored to their ordinary duties, as I stated at the commencement of this essay. By always following this course, when actively engaged in midwifery practice, I shielded my patients from the illnesses which often follow confinements. In ordinary practice, I believe the accoucheur takes leave finally of his patients three weeks after the confinement, and hears no more about them.

Gazette, vol. i., 1881), he says that the subject is meagrely treated of in the text-books. If met with in the earliest stage, when the finger has just begun to redden and tingle, a twenty-grain solution of nitrate of silver, or the silver stick wetted and lightly pencilled over the affected part and a little beyond, checks it at once. When the whitlow is a little more severe,—that is, when pus forms about the nail or the tip of the finger,—the cuticle, which is insensitive, may be incised. Occasionally, however, when a foreign body has found its way beneath the nail, pus forms there and gives rise to excruciating agony from the tension beneath unyielding structures. Judicious cutting away of the nail will relieve this if near the margin; but if near to the base, it is much better to pare down to the nail with a sharp knife until the matter is let out than to resort to the unnecessary cruelty of removing the entire nail.

The third kind of whitlow is really an acute necrosis of the terminal phalanx, following periostitis and suppuration beneath the periosteum, just as it does in the case of a long bone. A very slight injury—the prick of a needle or a pin—may set it up. After some hours' uneasiness, the pain becomes acute and throbbing, and entirely prevents the patient sleeping. If timely relief is not given, pus will very slowly make its way to the surface of the finger, but never up the sheath of the tendons, and, when discharged, will leave the greatest part of the phalanx bare and dead behind it. A timely and free incision is the only mode of saving the phalanx, and cannot be resorted to too early; for, if no pus be present, the inflamed periosteum will still be divided with great relief to suffering. The finger should be held firmly on a table, and the surgeon, entering his knife just above the transverse interphalangeal mark in the skin, should cut boldly down to the bone in its whole length from base to apex. When, as so often happens, these cases have been treated domestically with "soap and sugar" and poulticing until the end of the finger is riddled with sinuses, there is nothing to be done except to extract the necrosed phalanx as soon as it is loose and to bring the finger into shape by careful water-dressing applied in strips. The base of the phalanx usually survives, giving a point of attachment to the tendons.

Inflammation of the skin and subcutaneous tissues may occur in any part of the finger. Incisions must here be made with care, so as not to open the theca or sheaths of the tendons, which then invariably slough, and the patient is left with a useless finger. For this reason incisions on each side of the finger are safer than one in the centre, that may unawares let out the tendons, which will look perfectly healthy at the moment, but soon become sodden and softened.

The synovial sheaths of the flexor tendons of the thumb are often, though not always, in direct communication with the synovial membrane of the

WHITLOW.—In a clinic on this painful affection by Mr. Christopher Heath, (*Medical Times and*

annular ligament of the wrist, and hence pus is rapidly conducted in this way up to and, if not relieved, into the forearm.

There is much difference in the importance of saving the different digits. The thumb must be saved at all hazards. The middle and ring fingers are comparatively unimportant, and, if stiff, are apt to be in the way. A stiff forefinger is better than none.

VIBURNUM PRUNIFOLIUM IN UTERINE DISEASES.—Dr. E. C. Mann (*Boston Medical and Surgical Journal*) gives the following in reference to the use of this remedy: As many cases of diseases of women occurring in connection with nervous diseases are annually treated here, I desire to call attention to my own investigations with this comparatively new medicine. It appears to me to act directly and specifically upon the special nerves of the uterus as a true nerve sedative. I have had several very violent cases of congestive and neuralgic forms of dysmenorrhœa being accompanied by epileptiform convulsions of a very severe type, and in each and every case I have seen almost magical relief following the use of the fluid extract of viburnum prunifolium. The case referred to, which was so severe that the intensity of the pain had worn out the unhappy sufferer and induced the epileptiform attacks, was completely cured in a few weeks by the combined use of the viburnum prunifolium and the use of the constant current of electricity, the positive pole being applied to the hypogastric region, and the negative pole, to which was attached a cup-shaped electrode, directly to the uterus. The galvanic current has a very powerful influence in suspending contractions of the uterus, and also is very efficacious, when used locally over the ovaries, in controlling ovarian neuralgia. Previous to my using viburnum prunifolium I had been accustomed to rely on valerianate of zinc and fluid extract of gelsemium, with the constant current of electricity, but since my first experience with the former drug I have used nothing else. Although I have not had occasion to use it in cases of threatened abortion, I should deem it worthy of use from its action on the ganglionic nerve of the uterus. I have failed to perceive any action on the general system, the whole force of the medicine appearing to be directed to the uterus and its system of nerves. When the pulse has been high, from nervous excitement, and the temperature centres in the brain have been temporarily paralyzed, allowing sudden rise in temperature, from nervous excitement, both pulse and temperature have fallen to the normal as the uterine pain has been relieved. It must be remembered, also, that my cases have been aggravated ones, many of my cases have been sent to Sunnyside on the verge of insanity. My conclusions, therefore, are, that in viburnum prunifolium we have a uterine sedative more powerful

than any other in controlling dysmenorrhœa and uterine contractions, and that it probably acts by passing from the blood to the nerve centre, and is special in its effect upon the ganglionic nerves of the uterus.

CHRYSOPHANIC ACID IN PSORIASIS.—Chrysophanic acid has been used successfully for some time as a remedy for psoriasis. It is, perhaps, the best remedy we possess for that affection. Where, however, the skin affection is extensive, or the remedy too strong, it sometimes causes sickness and vomiting. It may be applied in combination with melted lard, or what is better, with vaseline, in the proportion of from 30 to 60 grains to the ounce. Dr. M. Charteris, of England, has been using the remedy, in combination with vaseline, with complete success in quite a number of cases. His article is published in the *Lancet* for July, 1881. In a case where the disease (*psoriasis*) extended over the whole body the usual formula of 1 to 8 of vaseline was found too strong; nausea and vomiting occurred, so that he was compelled to apply it of a much weaker strength, viz.: 1 to 16. During his experience he learned one singular fact, that where the disease was nearly equal on both sides, or was symmetrical, the application of chrysophanic acid and vaseline to one side of the body acted equally on both sides. He took patients, so afflicted, covered the arm and leg with close-fitting flannel, so that nothing could touch it, and made the application to the arm and leg of the opposite side. The covered limbs recovered from the affection nearly, if not altogether, as soon as those receiving the ointment.

Cases affected for months and years, and which had resisted all kinds of treatment, readily yielded to this plan in from 10 to 14 days.

It would appear from the disappearance of the affection on one side by the application of the remedy to the other, and also from the sickness it occasioned, that the acid is absorbed into the blood and acts as a constitutional as well as a local remedy. This fact explains the observations of Dr. R. Crocker, who applied the acid to one side of the body and turpentine to the other, and found the respective sides healed in about the same time. He concluded, therefore, that turpentine was as good a remedy for psoriasis as chrysophanic acid.

From the above experiments of Prof. Charteris, it is evident that the acid acts both locally and constitutionally, and that in Crocker's case the disease yielded to the constitutional effect of the acid, and not to the turpentine.—*Pittsburgh Medical Journal*.

THE TREATMENT OF SPERMATORRHŒA.—Dr. S. W. Gross, in his *Practical Treatise on Impotence and Sterility*, says: In all cases of seminal incontinence, with rare exceptions, the remedies

at the onset should be directed to overcoming the sensibility of the mucous membrane of the urethra, of the ejaculatory ducts, and of the seminal vesicles; to subduing the irritability of the muscles concerned in ejaculation; and to diminish the reflex excitability of the genito-spinal centre. Hence, they should be of a calming and sedative nature. By the ignorant and indiscriminate employment of strychnia, cantharides, phosphorus, damiana, and cold sitz-baths or affusions during the stage of hyperæsthesia, much harm is done and the therapeutics of spermatorrhœa are brought into disrepute.

Premising the statement that tonic should follow the sedative plan of treatment, I will now give an outline of my view as to the best management of the varieties of the affection:

Under all circumstances thirty grains of bromide of potassium, along with about ten drops of the fluid extract of gelsemium (Bartholow), every eight hours, and one-sixtieth of a grain of sulphate of atropia (Rosenthal) on retiring, are worth all the other internal remedies combined. In anemic subjects the bromide may be administered at night and quinine and iron be exhibited during the day; but if the bromide be badly borne, it should be guarded (or its cumulative action must be prevented by promoting its excretion by the urine by combining it with a diuretic, as ten grains of nitrate or bitartrate of potassa (Rosenthal). This combination is far better than that with Fowler's solution, which is advised by Gowers and Bartholow), or it may be replaced by twenty grains of chloral. Not only does atropia diminish reflex mobility of the genito-spinal centre, but the recent researches of Kenchel, Heidenhain, and Stricker and Spiner show that it paralyzes the movements of the cells of the acinous glands and checks their secretion, so that it cannot be dispensed with.

INOCULATION IN "CHARBON."—Monsieur Pasteur has lately accomplished a remarkable triumph as the result of a thoroughly scientific investigation into the cause of a disease which has occasioned much alarm among the stock-breeders of France. The disease is known by the name of "charbon," and has particularly attacked sheep, to such an extent that it is estimated to have caused injury to the amount of several million francs a year. M. Pasteur's investigation led him to the conclusion that the malady is communicated by infected grass. The grass, however, is only infected where animals that have died of the disease have been buried. In these spots worms, after having fed on the diseased carcass, rise through the soil to the surface collect round the roots of plants, are swallowed by the animals, and thus communicate to them the deadly virus. M. Pasteur has collected these worms. He separated the virus and fully examined it, ultimately obtaining it in all conditions; from

the most harmless to the virulent state. He then set up the theory that by inoculation the animals might be protected from "charbon." These theories, conceived in the laboratory, discussed before the Academy of Medicine, and warmly combatted, have lately been tested by practical experiments. On May 5th, M. Rossignol's farm and sixty sheep were placed at M. Pasteur's disposal. Ten of these sheep were left untouched, in order that they might later on serve for a comparison. Of the remaining fifty, twenty-five were marked with a hole in their ears and inoculated, first time on May 5th, and the second on May 17th. On May 31st, none of the inoculated sheep had lost fat, or gaiety, or appetite. On May 31st, the fifty sheep were taken without distinction and inoculated with the strongest virus. M. Pasteur predicted that by June 2nd, the twenty-five sheep not inoculated would be dead, and that the inoculated animals would show no symptoms of sickness. On that date, therefore, a number of eminent spectators came together to witness the result. Things turned out as M. Pasteur had foretold. At 2 o'clock twenty-three of the sheep which had been inoculated were dead. At 3 o'clock died the twenty-fourth, and the twenty-fifth an hour later. The twenty-five inoculated animals were sound, and frolicked and gave signs of perfect health. Only one of the twenty-five inoculated animals had been feverish, but the fever had entirely disappeared. It was caused by the animal having designedly been inoculated with too strong a dose of the virus. The twenty-five carcasses were buried in a fixed spot, and on the infected grass which will grow over it experiments are to be made with the inoculated and non-inoculated sheep. But the experiment is complete for all practical purposes, and M. Pasteur has thus been able by the exercise of his remarkable scientific skill to confer on his country a benefit, the capital value of which is at once calculable, and would amount, no doubt, to some millions of pounds sterling.—*Chemist and Druggist*.

TREATMENT OF EXTRA-UTERINE PREGNANCY.—Dr. Lusk (*Boston Med. and Surg. Journal*) cites several cases of extra-uterine pregnancy in which faradization and galvanism have been effectually used.

In the larger number the faradic current was employed, and of these his own case was one. Faradization in extra-uterine pregnancy was first successfully used by Dr. J. G. Allen, who reported in 1872, two cases of recovery through its instrumentality. So far, since then, his method, faithfully carried out, has proved uniformly successful, has presented no drawbacks, and all the women are known, from private inquiry, to be enjoying good health at the present time; while of one hundred and fifty cases of tubal pregnancy collected by Henning only seventeen survived.

The transmission of the current through the ovum has thus been proved a safe and efficient means for destroying the life of the foetus, during the first three months of its existence. The application consists in passing one pole into the rectum to the site of the ovum, and pressing the other upon a point in the abdominal walls situated from two to three inches above Poupart's ligament. The full force of the current of an ordinary one-cell battery should be employed for a period varying from five to ten minutes. The treatment should be continued for one or two weeks, until the shrinkage of the tumor leaves no doubt as to the efficacy of the treatment.

PROLAPSUS ANI.—R. Eichler, M.D., in *Western Lancet*, says: A boy five years of age came under my treatment, suffering from prolapsus ani of two years standing. The gut came out to the extent of two and a half inches after each passage. My treatment at first was of a routine kind—cold effusions, cauterizations with nitrate of silver, tincture of iron, etc. The bowel persisted in coming down at every passage. As a last resort, I tried an ergotine suppository.

R. Ergotine.....gr. ij
But. cocoa.....q. s.
M. Ft. Suppos.....no. j.

One after each passage.

The effect of the remedy has been magical, as after the use of a few of the suppositories, there has been no return of the condition, and the case is cured.

READY METHOD OF PREPARING FOMENTATIONS.
—Take your flannel, folded to the required thickness and size, dampened quite perceptibly with water, but not enough to drip, and place it between the folds of a large newspaper, having the edges of the paper lap well over the cloth, so as to give no vent to the steam. Thus prepared, lay it on the heated surface of the stove or register, and in a moment steam is generated from the under surface and has permeated the whole cloth sufficiently to heat it to the required temperature. This method is often very convenient and efficient where there is no opportunity to heat much water at a time.—*Michigan Medical News*.

PHTHISIS is being treated now, with reported success, by the continuous inhalation of the vapor of carbolic acid. Lister's gauze is occasionally dipped in a solution of the acid and then inhaled from a constantly worn respirator. "It is fair to infer that the application to internal suppurating surfaces of an agent, which has been used in similar cases, externally, with such benefit, will be equally efficacious in checking the growth and development of morbid germs and thus allow tissues to be reconstructed."—*Brit. Med. Journal*.

NOCTURNAL INCONTINENCE OF CHILDREN.—Prof. S. D. Gross, of Philadelphia, advises:

R—Strychniæ.....gr. j.
Pulv. cantharides.....grs. ij.
Morph. sulph.....grs. iss.
Ferri. pulv.....grs. xx.—M.

Mix: Make 40 or 50 pills or powders, *pro re nata*.

Sig.—One three times a day to a child ten years old.

This prescription will speedily relieve the irritability of the bladder, especially if conjoined with such means as a cold shower bath daily, the avoidance of irritant food and late suppers, the patient lying on the side or belly, and taking care to drink nothing for the few hours preceding sleep, and to empty the bladder on going to bed.—*Mich. Med. News*.

PROF. HUXLEY says: "The body resembles an army; each cell, a soldier; an organ, a brigade; the central nervous system headquarters, a field telegraph; the alimentary and circulating system, the commissariat, and in which losses are made good by recruits born in camp, and the life of the individual is a campaign, conducted successfully for a few years, but with certain defeat in the long run."

At a meeting of the American Neurological Association, in speaking of the administration of the bromides, Dr. W. A. Hammond said that of the salts he preferred the bromide of sodium, but had given of late bromine alone.

R—Bromine, ʒ i
Aqueæ, ʒ viii.—M.

S.—Teaspoonful, well diluted.

Dr. Jewell had used bromine with favorable results, and Dr. Seguin said that he considered that the efficient agent was the bromine, and not the potash or soda.

A DOCTOR who had continued his visits on a wealthy lady for an inordinate time after convalescence had set in, was somewhat surprised one day, at being told by the servant that madame could not see him that day as she was ill.

MR. LISTER, recently, in a case of fractured patella, laid open the joint with antiseptic precautions, evacuated the extravasated blood, and brought the fractured ends of the patella into apposition by a strong wire suture.

PROF. PAUL BERT has shown that just twice the quantity sufficient to produce anæsthesia, by any anæsthetic, will produce death.

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This Journal has the largest circulation of any Medical Journal in Canada.

PRESIDENT GARFIELD.

In our last issue we made some allusion to the illness of President Garfield, and to the probable result of the case. Since then our predictions have been verified by the sad ending of one whose life hung in the balance for eleven long and dreary weeks. The medical profession watched with intelligence, interest and sympathy, the varying course and symptoms of this now historical case, and many no doubt were forced to the same conclusion as ourselves as to the issue. Symptoms of pyæmia were manifest at a comparatively early period, and though the attending surgeons were slow to acknowledge it, they knew it to be the fact nevertheless. That pyæmia did exist, and was the principal factor in causing his death, was abundantly attested by the *post mortem* examination. The parotid, intra-abdominal, and renal abscesses demonstrated this only too well. The immediate cause of death, however, was the giving way of one of the mesenteric arteries, a circumstance which could not have been anticipated. Even if this accident had not occurred, it is not possible that life could have been prolonged many days, and recovery was out of the question. The autopsy, the official report of which we give below, was a surprise to many. The ball appears to have taken nearly a direct course and was found flattened, and completely encysted, two inches and a half to the left of the median line, below the pancreas and behind the peritoneum. In its course it had fractured the eleventh rib and also the anterior surface of the body of the first lumbar ver-

tebra. What was supposed, during life, to have been the track of the bullet turned out to be a sinus leading to an abscess cavity extending downwards towards the right ilium. Even had a correct diagnosis in this respect been made during life, the result would still have been the same. Gunshot wounds of the spongy portions of bone, such as the vertebræ, are among the most fatal of accidents, and this case proved no exception to the rule. The following is the official bulletin of the autopsy issued by the attending surgeons:—

Present, — " Drs. Hamilton, Agnew, Bliss, Barnes, Woodward, Reyburn, Andrew H. Smith, of Elberon, and Acting Assistant-Surgeon D. S. Lamb, of the Army Medical Museum, Washington. The operation was performed by Dr. Lamb. It was found that the ball after fracturing the right eleventh rib had passed through the spinal column in front of the spinal canal, fracturing the body of the first lumbar vertebra, driving a number of small fragments of bone into the adjacent soft parts and lodging below the pancreas, about two inches and a half to the left of the spine and behind the peritoneum, where it had become completely encysted. The immediate cause of death was secondary hemorrhage from one of the mesenteric arteries adjoining the track of the ball, the blood rupturing the peritoneum, and nearly a pint of blood escaping into the abdominal cavity. This hemorrhage is believed to have been the cause of the severe pain in the lower part of the chest, complained of just before death. An abscess cavity six inches by four in dimensions was found in the vicinity of the gall bladder between the liver and transverse colon, which were strongly inter-adherent. It did not involve the substance of the liver, and no communication was found between it and the wound. A long suppurating channel extended from the external wound between the loin muscles and the right kidney almost to the right groin. This channel is now known to be due to the burrowing of the pus from the wound. It was supposed during life to be the track of the ball. On examination of the organs of the chest, evidence of severe bronchitis were found on both sides, with bronchopneumonia of the lower portions of the right lung, and—though to much less extent—of the left. The lungs contained no abscesses, and the heart no clots. The liver was enlarged and fatty, but

free from abscesses, nor were any found in any other organ except the left kidney, which contained near its surface a small abscess about a third of an inch in diameter. In reviewing the history of the case in connection with the autopsy, it is quite evident that different suppurating surfaces, and especially the fractured spongy tissues of the vertebra, furnish a sufficient explanation of the septic condition which existed. (Signed), D. W. Bliss, J. K. Barnes, J. J. Woodward, R. Reyburn, F. H. Hamilton, D. H. Agnew, A. H. Smith, D. S. Lamb."

There can be no doubt, in view of all the facts of the case, that the late President received all the aid which medical science and intelligent medical skill could give. The surgeons in attendance deserve the thanks of the Nation, and it is the manifest duty of the profession to uphold and defend them from any reproach which may be heaped upon them by the laity or dissaffected doctors. There is one circumstance, however, which the medical press and profession can hardly afford to pass over in silence. We refer to the reported unprofessional conduct of Dr. Bliss. After the wounding of the President, messengers were sent, as is usual in such cases, in all directions, for physicians. Dr. Townshend was first in attendance, and according to ordinary courtesy, and the code of ethics, should have had charge of the case until the family physician arrived. Dr. Purvis was the next to arrive, and after him Dr. Bliss, who at once assumed control of the case, and retained it until the arrival of Dr. Baxter, U. S. A., the President's family physician, who had been out of the city. On Dr. Baxter's return, he presented himself at the White House, where he met Dr. Bliss, whom he asked to take him to see the President. This Dr. Bliss refused to do, stating that he wanted to keep the President quiet. Dr. Baxter said he made the request as the President's physician, having attended him for years. To this Dr. Bliss replied: "I know your game, you wish to sneak up here and take the case out of my hands." Angry words followed, and Dr. Baxter recognizing the impropriety of making any disturbance in such a place, took up his hat and left the room. It is wholly unnecessary to comment upon the unprofessional and unbecoming conduct of Dr. Bliss. Such conduct is unworthy of any member of the profession, and carries with it its own condemnation.

MEDICAL FEES.

Of all subjects treated of, none should interest the medical profession more than the subject of medical fees. Most medical men in this, and we suppose in most countries of the world, have to rely upon the fees derived from their practice for the support of themselves and their families, and it is very much to be regretted that they are in many instances so poorly paid for their services. The reason for this state of affairs in general, is not difficult to apprehend. Medical men, as a rule, are themselves to blame, from the fact that they do not sufficiently appreciate the value of their services; they do not properly insist upon being paid suitable fees; and what is worse, they occasionally endeavour to detract from the value of each other's services. The acquisition of an unusual fee by some fortunate "medico" is the occasion for any amount of shoulder-shrugging, and an envious cry of "high charges." As a rule, the regulars get the "regular fees" and the big fees go to the quacks.

In respect of fees, there is a most striking contrast between members of the medical and legal profession. Who ever heard a legal gentleman crying out against "high charges" in respect of his brethren at the Bar? Neither as a rule, in this part of the country, at all events, can the profession complain against the lawyers or judges for not supporting their claims when necessity compels them to bring them before the Courts. One Judge in this city, to our own knowledge, requested the plaintiff to double the charges, which were ridiculously low, and gave a verdict in his favor immediately.

The local medical attendants upon the late lamented President of the United States, are said, according to newspaper reports, to have charged the Government \$100 per day, and Drs. Hamilton and Agnew, each \$1,000 per day. These seem large fees, but not more, we venture to say, than would have been charged by any leading lawyer in some important suit in which the Government might be concerned. We trust that no medical man in the United States will be found mean enough to carp at the above fees paid to his medical brethren, but rather that he will congratulate himself and his confreres on the fact that the claims of the profession in the matter of fees have for once, at all events, had a proper recognition.

The medical fees in this city, and in fact in all parts of the country, are ridiculously low, and in view of the return of the country to prosperity, and the increase of wages to laboring men and salaries to public officers, it is a most opportune moment for the medical profession to institute a movement for an increase in the ordinary fees. We would urge this strongly upon the attention of our brethren, for depend upon it, if we do not put a proper estimate upon the value of our services the public never will. It only requires a little energy and activity on the part of the profession at the present moment to accomplish this most desirable reform, and we trust that no time may be lost.

Another matter occurs to us, which we think requires to be ventilated. We refer to the large amount of gratuitous work done by medical practitioners, especially in towns and cities. Every person, rich or poor, seems to think he has some claim upon the services of a medical man, and what a cry of inhumanity is raised against a physician if he refuses his services to the poor without a fee. Yet the baker is not blamed for refusing bread on the same conditions, or the butcher for refusing meat. The London *Lancet* in a recent number gives the following in reference to this subject:—"There is a very comfortable doctrine abroad, that doctors are at everybody's service in an emergency, and that they are bound to rise from their beds and go to a distant alley to save a life or ease a pain, without the least prospect of pay. But is such mercy to be shown only by doctors? Why does not the public share with doctors the cost and the credit of such service? It is society's duty, not that of any single profession, to see that no human creature, however poor, dies without medical aid. A country like this should make provision for the emergencies of its poor, and not throw the whole onus on the much enduring and little paid members of our profession."

Medical men are not only supposed to attend all the sick poor gratuitously, but they are also expected to give of their scanty earnings to charitable purposes. This is certainly asking too much—and we wonder that the overburdened profession does not cry out against such injustice. Medical practitioners are also taxed by the municipal authorities to the full extent of their income from practice, and in some cases, for more than they

actually receive, and yet they are expected to treat the poor gratuitously. Of course this will continue as long as the profession is willing to submit to it; but we maintain that it is manifestly unjust and unfair, and the sooner it is rectified the better. We submit that the municipal authorities should either remit the taxes on the doctors' incomes from their practice, or pay for the medical treatment of their poor. The fact that the injustice of taking the medical man's services for nothing and taxing his scanty earnings, has been the custom for years is no reason for its longer continuance.

MEDICAL THERMOMETRY.

This subject has come to be regarded as one of very great importance, both in medical and surgical practice. The ordinary means of determining the temperature of the body are so very imperfect, that a considerable deviation may be present and escape observation. All abnormal temperatures denote the presence of disease, and in many cases the physician is greatly aided in his diagnosis and prognosis of a case by ascertaining the temperature of the body, and this, with the means at our command, may be determined with a nicety which is common to few other phenomena. The temperature of the body cannot be feigned or falsified, and its abnormality may decide the degree or danger of the attack. Relapses, complications, or transitions in the course of disease, may in this way be discovered before they could otherwise be recognized. It reveals the imminence of a fatal termination, or the impossibility of recovery. In surgery the application of the thermometer determines the practicability or possibility of an operation where there are grave doubts.

The variations of temperature, however, to be of any real practical value must be taken regularly night and morning. A single observation, while it may point out that a patient is very ill, is not by itself conclusive as to the kind of disease present. When we have extremes of temperature we know there is great danger. For example, temperatures below 96.5F. are *collapse* temperatures, 92. fatal collapse. Temperatures from 100 in the morning to 104 in the evening, are *febrile* temperatures, and temperatures from 104 in the morning to 107 in the evening are *hyperpyretic* temperatures, 107

and above indicating a fatal termination. Every medical practitioner is aware of the difficulty in diagnosing at an early stage between the different febrile diseases, and it is here that the thermometer comes largely to our aid. If the temperature is normal, or only slightly increased, pneumonia, scarlet fever, typhoid fever and small-pox are excluded; if the temperature is high at the outset, typhoid fever, influenza, and articular rheumatism are excluded, but pneumonia, pleurisy, intermittent and ephemeral fevers, the exanthemata, pyæmia, or meningitis, may be present. In the early days a high morning with a normal evening temperature would indicate intermittent fever, while a high febrile temperature the first or second day would exclude typhoid.

It would, however, be entirely a work of supererogation on our part, to urge upon the profession of to-day the value and utility of the thermometer in daily practice, and while this is no doubt universally recognized, it is of equal importance that these instruments of precision should be what the name implies. From the report of the Winchester Observatory of Yale College, it would appear that many of the thermometers in daily use by medical men are inaccurate. In June, 1880, a circular was issued from this bureau in which the subject was discussed, and an offer was made to the members of the profession in the United States and Canada to correct any clinical thermometer sent for the small sum of fifty cents. Many availed themselves of this offer, and the result has been that sixteen hundred and sixty-seven thermometers have been corrected and certificated since that date; among these fifty physicians' thermometers had errors exceeding a degree and a half. If thermometers are to be used at all in the practice of medicine, and we apprehend no one doubts their utility in certain cases, they should be as accurate as possible. Proper seasoning of the tubes used in the manufacture of thermometers, and more careful graduation, are the remedies proposed by the bureau, and manufacturers are recommended to send the tubes to the Observatory to remain under seal a year before being graduated, and some are already taking advantage of this suggestion. In the meantime, those who have thermometers that are not above suspicion, should lose no time in having their presumed errors rectified, by sending them to the Winchester Observatory, Yale College, New Haven, Conn.

ELECTRICITY AND BULLET WOUNDS.—Since the autopsy in the case of President Garfield, there is curiosity manifested to know why the electricians failed to locate the fatal ball. Some seem to think that the failure to locate the bullet by the induction balance was caused by the experimenters trying to obtain results beyond the power of the instrument. With the ordinary induction balance, as invented by Prof. Hughes, the absence or presence of the smallest piece of metal is clearly indicated at short distances. When Prof. Bell tried the experiment in Washington the bullet was at too great a distance from the coils. The consequence was, that as the experimenters knew they could get only the faintest results, if any, from the presence of the bullet, they were led perhaps to accept imaginary differences in the sounds they heard. The error may have occurred in another way, namely, through the presence of some metallic substance (other than the looked for bullet), which was overlooked by the experimenters. Notwithstanding, however, the failure of the experiment in this instance, surgeons should not be deterred from repeating it in cases where it may prove useful. There is not the least doubt that when the conditions are favourable the induction balance will give effectual aid in treating gun-shot wounds. By using the instrument any bullet that is not very distant from the surface could probably be detected at once.

SPECIALISTS IN MEDICINE.—Dr. Billings, in his address before the International Medical Congress in London, said :—"There must be specialties and specialists in medicine, and the results will be both good and evil; but the evils fall largely upon those specialists who have an insufficient general education, who attempt to construct the pyramid of their knowledge with the small end as a foundation. It has been said by Dr. Hodgen, that 'in medicine a specialist should be a skilled physician, and something more: but that he is often something else—and something less.' There is truth in this; truth which the young man will do well to consider with care before he begins to specialize his studies; but, on the other hand, it is also true that the great majority of men must limit their field of work very much and very clearly if they hope to achieve success. The tool must have an edge if it is to cut. It is by the labor of specialists that many of the

new channels for thought and research have been opened, and if the flood has sometimes seemed to spread too far, and to lose itself in shallow and sandy places, it has nevertheless tended to fertilize them in the end." The specialists are not only making the principal advances in science, but they are furnishing both strong incentives and valuable assistance towards the collection and preservation of medical literature and the formation of large public libraries.

OPHTHALMOLOGY: MIDDLEMORE FUND PRIZE ESSAY.—The interest on the fund of £500 given in trust to the British Medical Association by Mr. Richard Middlemore of Birmingham, to found a prize for the best essay on Ophthalmology, having accumulated for three years, the Committee of Council now offer, in accordance with the terms of the trust deed, a prize of £50 for the best essay on the Scientific and Practical Value of Improvements in Ophthalmological Medicine and Surgery made or published during the past three years. The successful essay will be the property of the Association. Essays must be in English or accompanied by an English translation, and forwarded under cover, with a sealed envelope bearing the motto of the essay, and containing the name and address of the author, addressed to the General Secretary of the British Medical Association, 161A, Strand, London, and must be in his hands on or before May 31st, 1882.

SUIT FOR MALPRACTICE.—We regret to learn that Prof. McLean, of Ann Arbor, (formerly of Kingston, Ont.,) is about to be subjected to a suit for malpractice, the damages being laid at \$20,000, in consequence of his failure in an operation for the relief of recto-vaginal fistula. In order to bring the parts properly together, the Dr. divided the perineal body. Union did not take place owing to the patient's ill-health, and there is now prolapsus of the uterus and rectum. Suits for malpractice are the opprobria of surgical practice, and both judges and juries too often fail to understand that surgeons cannot always overcome natural defects. The differences of opinion also among medical men, where, in many cases no difference should exist, often occasion a failure of justice. We trust, however, that Prof. McLean will be supported by the testimony of his professional brethren, and that the verdict will be in his favour.

PRIZE ESSAY.—The committee of selection appointed by the chairman of the section on Practical Medicine, Materia Medica and Physiology, at the recent meeting of the American Medical Association, have selected, and hereby announce, as the subject for the prize to be awarded in 1883, the following question:

What are the special modes of action, or therapeutic effects upon the human system, of water, quinia, and salicylic acid, when used as anti-pyretics in the treatment of disease? The essays must be founded on original experimental and clinical observations, and must be presented to the chairman of the committee of *award* on or before the first day of January, 1883—N. S. DAVIS, H. D. HOLTON, W. B. ULRICH, *Com. of Selection*.

TINC. FERRI MUR. IMPROVED.—The addition of half a drachm of citrate of potash to the drachm of tincture of iron improves the quality of the latter for internal administration, by removing the peculiar roughness of the iron and its unpleasantness in the mouth. The following formula will be found most suitable:

R—Tinc. Ferri Mur.....3ij.
Potas. citrat.....3j.
Syr. Limonis3iss.
Aquæ ad.....3viii.—M.

SIG.—A tablespoonful three times a day.

It may also be combined with substances containing tannic acid, as gentian, &c., without decomposition.

PROGRESS OF MEDICAL SCIENCE.—A little over a hundred years ago, Haller, in Göttingen, was professor of anatomy, botany, physiology, surgery, and obstetrics, and lecturer on medical jurisprudence. At the same time he was writing one review a week, and summing up existing medical science in his "Bibliotheca." To-day any one of these branches requires all the time of the most energetic and learned of our contemporaries. but, on the other hand, the well-educated medical graduate of to-day could give Haller valuable instruction in each of branches of which he was professor.

MARKED C. O. D.—A doctor in Dayton, (Ohio *Med. Journal*) was recently attending a case of labor in the family of one of his patients who, though a very excellent man, is a little slow in the payment of his medical bills. Immediately after

the birth of the child the father nervously asked, "Doctor, is the baby marked"? Yes, quietly replied the doctor, "It is marked C.O.D." The hint was taken, and the bill for that baby promptly settled.

FEES WORTH HAVING.—According to newspaper reports, the four surgeons in attendance on President Garfield, Bliss, Barnes, Woodward and Reyburn, charged the Government \$4,200 each, or \$100 each per day, for 42 days attendance. Dr. Agnew's bill for the same number of days for "consultations, operations and visits" was \$32,600, and Dr. Hamilton for "visits and consultations," rendered a bill for a similar amount. The remaining 38 days will no doubt be charged at the same rate.

THE GILCHRIST SCHOLARSHIP.—The Gilchrist Scholarship of this year has been won by Mr. Howard Murray, of New Glasgow, son of Dr. George Murray, formerly M.P.P. for Pictou. This is another honor for Pictou county and for Dalhousie College. Mr. Murray was for three years a student of Dalhousie, and stood first in each subject in all three sessions.

MILK DIET IN RENAL DROPSY.—M. Chautreuil, in the *Gaz. des Hôpitaux*, May, 1881, records a number of cases of general dropsy with albuminuria occurring in the later months of pregnancy, which were relieved and uræmic eclampsia apparently prevented by milk diet. In cases in which there was swelling of the feet and legs with more or less general anasarca, and abundant albumen in the urine, milk diet persevered in for a short time had the effect of removing the anasarca and diminishing the quantity of albumen in the urine. In one case the quantity of albumen was greatly lessened and the patient did well throughout, while in her previous confinement she had a severe attack of puerperal eclampsia.

APPOINTMENTS.—Dr. Whiteford of Winnipeg, and late of Ottawa, has been appointed chief medical officer of the Manitoba and South Western Railway.

Dr. Edward J. Kelly has been appointed assistant surgeon 41st Brockville Battalion *vice* A. Fowler, left limits.

Dr. Robert H. W. Powell has been appointed surgeon 43rd Ottawa and Carleton Battalion.

Dr. H. Augustus Wilson has been appointed Pathologist to the Presbyterian Hospital, Philadelphia, *vice* De Forest Willard, M.D., resigned.

CORONER.—Dr. Finlay McMillan, of Sheet Harbor, has been appointed coroner for the county of Halifax, N. S.

Books and Pamphlets.

A SYSTEM OF SURGERY, THEORETICAL AND PRACTICAL. In Treatises by various Authors. Edited by T. Holmes, M.A., Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital. First American from second English Edition, thoroughly revised and much enlarged. By John H. Packard, A.M., M.D., Philadelphia. Assisted by a large corps of most eminent American Surgeons. In three volumes, with many illustrations. Philadelphia: Henry C. Lea's Son & Co. Toronto: Hart & Co.

The work before us is the first volume of this admirable work on surgery. The publishers have been able, by setting it in smaller type, to compress the original five volumes into three, which will be published during the present year. Vol. I. is devoted to general pathology, morbid processes, injuries in general, complications of injuries, and injuries of regions, and is illustrated with 245 wood-cuts and nine chromo-lithographs. Among the English contributors are John Simon, J. Burdon Sanderson, John Croft, W. S. Savory, Henry Lee, Sir James Paget, Timothy Holmes, and Geo. W. Callender. Among the American are John B. Roberts, Jas. Nevins Hyde, Samuel Ashurst, John H. Packard, J. S. Jewell, Roberts Bartholow, and John T. Hodgen. The matter added by the latter is enclosed in brackets. The English edition of Holmes' Surgery has long occupied a leading position in the surgical literature of the day. It therefore needs no words from us to commend it to the favorable consideration of the profession in Canada. It is a work that should be on the shelves of every medical man's library. It contains all the recent advances in this most important subject, and is fully abreast of the present state of surgical science. Each writer may be considered as a specialist in the subject upon which he has written, a circumstance which greatly enhances the value of the work. We cannot commend the work too highly. It will be sold only by subscription.

A TEXT-BOOK OF PRACTICAL MEDICINE, with special reference to Physiology and Pathology. By Dr. Felix Von Niemeyer. Translated from the 8th German Edition, in two volumes. New York: D. Appleton & Co. Toronto: Willing & Williamson.

Niemeyer's Practice of Medicine has been extensively read by the profession in this country, and was, ten or twelve years ago, considered by many as the work *par excellence* in medicine, and one that might be placed side by side with Watson's Practice, the "Blackstone" of our schools in those days. The author died in 1871, and no new editions have been published until the present one, edited by Dr. Eugene Leitz, who has made extensive alterations and inserted a large amount of new matter, in order to bring the work abreast of the recent advances in Pathology. Those who have read the previous editions will be glad to learn that the work of the great teacher has again been placed in the front rank. Notwithstanding the large number of books on the practice of medicine, we have no doubt that this great work will make its way before the profession, and be again adopted as a standard work on the Practice of Medicine.

ATLAS OF SKIN DISEASES. By Louis A. Duhring, M.D. Parts VIII. and IX. concluding the series. Price \$2.50 each. Philadelphia: J. B. Lippincott & Co., 1881. Toronto: Willing & Williamson.

These are the last two numbers of the series of this admirable Atlas, by Dr. Duhring. This work which is now completed, is an enterprise which both publishers and author have good reason to be proud of. The plates portray in living colors the forms of skin disease of most common occurrence, and the descriptive text is all that can be desired in connection with an atlas. We have in previous editions given expression to our appreciation of this interesting and instructive work, and trust that the author may reap the full reward of his arduous labors in connection with its preparation. We prize the work highly, and are having it handsomely bound.

A TREATISE ON CONTINUED FEVERS. By James C. Wilson, M.D., and J. M. Da Costa, M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

The authors of this treatise, whilst engaged in their work of teaching, have evidently felt the want

of a work to which they might refer their pupils in which the diseases treated of were described at greater fulness than is usual in text books, yet without the extreme elaborateness of Ziemssen or other cyclopædic writers. After the introduction by Professor Da Costa, the work consists of eight chapters on simple continued fever, influenza, cerebro-spinal fever, enteric or typhoid, typhus, relapsing fever, and dengue. The volume bears in every page the impress of the care that has been expended on its execution, and is eminently calculated as a work of reference to both practitioner and student.

WOOD'S PHYSICIANS' VADE-MECUM AND VISITING LIST. By H. C. Wood, M.D. Philadelphia: J. B. Lippincott & Co.

This is a most excellent physicians' visiting list. It is nicely bound in morocco, of convenient size, and contains much useful information. A new feature is the introduction of woodcuts, showing the motor points of nerves for the application of electricity. We commend it to the consideration of our readers.

THE PATHOLOGY AND TREATMENT OF THE DIARRHŒA OF PHTHISIS.—Dr. C. T. Williams has a series of articles upon this subject in the *Lancet*.—*N. Y. Record*. He divides the different diarrhœas of phthisis into three classes. The first includes those simply due to irritation or a catarrh of the intestines. The treatment consists simply in altering the dietary and ordering a few doses of alterative and purgative medicine, with some alkali to reduce the acidity. The second form is that arising from ulceration. The ulcers usually begin in the small intestine, near the ilio-cæcal valve; as the ulceration progresses, however, the large intestine becomes most affected. The treatment of this form requires very careful attention. It resolves itself into three sets of measures: (a) Rest in bed with the administration of easily assimilable food, such as chicken-broth, beef and veal-tea, milk gruel, blanc-mange, always combined with *liquor pancreaticus*, after the methods described by Dr. Wm. Roberts. Koumis is also highly recommended. (b) Warm applications to the abdomen, in the form of linseed poultices, turpentine stupes, or hot-water fomentations, to reduce the pain and produce derivation to the skin. In severe pain small blisters are useful. (c) Internal medicines: bismuth and opium will answer in slight cases. The most powerful astringent is sulphate of copper in one-quarter or one-half grain doses. Of vegetable astringents tannic acid is the best, in four-grain doses. Indian ball is often efficacious. If the

ulcerations are largely in the colon, injections or suppositories are often needed. The ordinary enemata of lead and opium will sometimes answer, but in severe cases a pint or a pint and a half of linseed tea, combined with medicines, are needed. Linseed tea seems to be especially efficacious. The third form of diarrhoea is due to waxy degeneration of the intestinal wall. This is hard to deal with successfully. The waxy degeneration indicates a need for phosphates of potash. The diarrhoea can only be treated, as in other diarrhoeas, by the use of astringents.

ABERNETHY ON TABLE-HYGIENE.—There are still, we believe, some apostles of rapid eating among the doctors in this country. We commend to their attention the following interview (from "Sam Slick"), which is worth a hundred lectures: "The Honourable Allen Gobble was dyspeptic, so he goes to Abernethy for advice. 'What's the matter with you?' says the doctor. 'Why,' says Alden, 'I presume I have the dyspepsy.' 'Ah!' says he, 'a Yankee, swallowed more dollars than you can digest.' 'I am an American citizen,' says Alden, with great dignity; 'I am secretary to our Legation at the Court of St. James.' 'The devil you are!' says Abernethy; 'then you'll soon get rid of your dyspepsia.' 'I don't see that inference,' said Alden. 'But I tell you it does follow,' says the doctor, 'for in the company you'll have to keep you'll have to eat like a Christian.' It was an everlasting pity Alden contradicted him, for he broke out like one moon-distracted mad: 'I'll be d—d,' says he, 'if ever I saw a Yankee that didn't bolt his food whole like a boa constrictor. How the devil can you expect to digest food that you neither take the trouble to dissect nor time to masticate? It's no wonder you lose your teeth, for you never use them; nor your digestion, for you overload it; nor your saliva, for you expend it upon the carpets. You Yankees load your stomachs as a Devonshire man does his cart, as full as it can hold and as fast as he can pitch it in with a fork, and drive off. And then you complain that such a load is too heavy for you.'"—*Med. Record*.

DEATHS FROM ETHER.—Dr. John B. Roberts (New York Medical Record, July 2, 1881,) is inclined to think that the failure of respiration is not always the first sign of danger of death from ether, but that the heart may begin to fail seriously while respiration continues active. He thinks that the pulse ought to be watched more closely than it usually is, that in some cases the urine ought to be examined as well as the heart and lungs, and that the person who is entrusted with the ether administration should be the most skilful of all the assistants. Dr. Roberts has collected twenty cases of death from ether that have been reported since January, 1872. There is great prejudice in the

United States in favor of the harmlessness of ether that pains-taking researches of this kind are needed to overcome.—*Chicago Medical Review*.

MEDULLARY CANCER OF THE PYLORUS.—Dr. Thomas C. Smith, of Washington, D.C., sends us the history of a case of the above, in which there was no pain or other symptom pointing to the disease during life. The anterior wall of the stomach was also affected, and a perforating ulcer formed at that point, which broke into an abscess in the sheath of the rectus muscle. This abscess communicated a pulsation from the abdominal aorta, which gave rise to the suspicion of the existence of an aneurism at that point.—*Medical Record*.

ASIATIC CHOLERA.—Dr. DaCosta, of Philadelphia, has recently had under observation a case which presented all the symptoms which he, with his great experience, had learned to consider pathognomonic of Asiatic cholera, and he would have so pronounced the disease, were it not that the case was a sporadic one, no epidemic being prevalent anywhere in the United States or Europe. Several additional cases of the same kind have been reported by independent observers in Pennsylvania. Whether this be due to the epidemic tendency to the discovery of diseases which at times seizes the profession, or not, these cases should certainly lead the National Board of Health to keep a close watch on all vessels landing on the Pacific coast, as from them, if anywhere, this danger is to be apprehended.

FOUR rules for the preparation of an article for a journal: 1. Have something to say; 2. Say it; 3. Stop as soon as you have said it; 4. Give the paper a proper title.—*Bilings*.

Births, Marriages and Deaths,

On the 14th ult., at St. Paul's Church, Woodstock, Ont., by the Rev. J. J. Hill, Rector, T. Millman, M.D., &c., second assistant physician, Asylum for the Insane, London, to Helen Dick, only daughter of John Craig, Esq., of Woodstock.

At Muskegon, Mich., on the 13th ult., Andrew Chapman, M.D., late of Ancaster, Ont., aged 24 years.

At Shelburne, N. S., on the 5th ult., John A. Purney, M.D., in the 38th year of his age.

At Liverpool, N. S., on the 15th of May, A. Robertson, M.D., aged 34 years.

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Original Communications.

ALCOHOL AS AN ANTISEPTIC IN THE TREATMENT OF WOUNDS.—TRANSLATION.

BY JOSEPH WORKMAN, M.D., TORONTO.

In a number of *La Emulacion*, a medical periodical published at the city of Merida, in Yucatan, there appears a communication by Dr. J. R. Sauri, on the above subject, which seems to us deserving of particular attention, as we are not aware that in American or European surgical practice, recourse to alcohol as an antiseptic has obtained to any important extent, if indeed its efficiency has been at all appreciated by the great majority of surgeons.

Dr. Sauri informs his readers that he was led to the employment of alcohol in the treatment of severe and extensive wounds, from having realized its value in the healing of trivial ones, and from the unfortunate issue of nearly all cases of the former class in the General Hospital of Merida, the foul air of which, consequent on defect of space and very defective means of ventilation, had long distressed him. The following will best exhibit Dr. Sauri's views:—

"It will not appear strange, in view of the outline I have given (of the defects of the hospital) that purulent infection was so common in the establishment, and that up to 1878, the wounded and the subjects of operation, almost with certainty died, despite of all the precautions taken to avert purulent infection. Under these circumstances we were led to make trial of the treatment of large wounds by alcohol, as our principal antiseptic. Previous to this time we had limited the use of this agent to wounds of the scalp and to small wounds in various parts of the body. The number so treated, and the results obtained by this

means, showed the value of the plan to be better than was obtained in practice, either in families or in the field.

We frequently receive into the hospital two classes of bad wounds:—"Those caused by machines armed with cutting blades, and those from crushing by loaded cars. The former come from the haciendas, and the patients are presented to us from six hours to forty after the accident, the knives of the machines, driven by steam, having cut off sometimes only the phalanges, but at other times the fore-arm and even the entire superior member, has been torn from its articulation with the trunk."

* * * * *

"Practice has showed to me," says Dr. S., further on, "that alcohol, in contact with denuded surfaces, produces at the moment a sensation of heat, which is succeeded presently by a certain transient intumescence. I have observed that under the influence of this agent, an inflammatory condition of the wounds does not take place, or it has been reduced to a minimum of intensity; furthermore it promotes and facilitates cicatrization, opposing in many cases the formation of pus, or diminishing this secretion when it presents. This advantage, obtained in the treatment, might alone suffice to accredit it, since it almost certainly impedes the accidents of purulent putrid infection, which prove so fatal to patients. We speak not of it with magisterial authority; we merely desire to express the fact that the clinical observations collected by us in the General Hospital, have served as the basis of our judgment, whether in the regular dressing of wounds, or in the carrying through of amputations in those cases which urgently called for this process.

"It is proper, however, to observe that in certain much bruised wounds, which cannot be regularly adjusted, or in those in which suppuration is presented, or is of a yellowish or orange color, and of viscid consistence, I abstain from the employment of alcohol. Experience has shown me that in these circumstances the tendency to purulent infection is very strong, and I therefore endeavour to avert it by other means, as in the following case:—

The fore-arm had been torn off in its middle third, and desiring to save the rest of the limb, I dressed the wound as well as possible, applying

alcohol of the strength 26° ; two days afterwards I was surprised by the appearance of a thick orange colored suppuration, because of which I substituted some powders of bark, charcoal and camphor in equal parts, with cleansings by decoctions of bark, and sulphate of quinine with iron inwardly. I was thus able to save the patient, who is now quite well.

As a rule, I prolong the treatment by alcohol some 12 or fifteen days, and then substitute cerate or glycerine; in some cases however, I have judged it advisable to continue the alcohol for a month, when its use was indicated by results, and the patient or the hospital could afford the expenditure, which is indeed large."

Dr. Sauri details three very instructive cases, treated by him with the alcoholic dressing, which we venture to present without curtailment.

Observation first.—Cutting off of the fingers and division of the left cubito-carpal articulation. —Francisco G., a native, aged 14 years, having imprudently exposed his hand, whilst working on a machine armed with cutting blades, was seized on the left hand by the principal wheel, one of the blades of which cut off the four fingers, and the second blade divided the cubito-carpal articulation, leaving at the wrist only the connection with the radius. In spite of the indication presented on first sight, to amputate in the lower third of the fore-arm, I proposed to wait, and uniting as well as possible the displaced parts, and removing some splinters of bone, I applied over the wound a large covering of folds of lint wetted with alcohol of 22° strength, and kept in place by a bandage. This simple application, renewed daily, and constantly kept moist by the patient himself, proved sufficient not only to prevent all inflammatory traces in the wounds, or any general reaction, but also to secure rapid cicatrization, so that in 15 days they appeared covered with fleshy prominences, without suppuration, and at the end of 38 days he was well, and the hand was capable of some movements.

Observation second.—Fracture of the femur and tibia, sub-periosteal resection.—José G. Colli, native of Cansacab, Yucatan, aged 30 years, unmarried, of good constitution, by occupation a car conductor, entered the hospital 22nd December, 1879.

Two days previously he fell under the wheels of

a loaded car, and suffered a simple fracture of the femur in its middle part, and in addition a comminuted fracture complicated with a wound in the second third of the tibia on the same side; the solution of continuity gave passage to the upper fragments of this bone and of the fibula, over an extent of two centimetres.

At the time of our examination the thigh was found tumefied, in consequence of which it was not possible to attempt reduction, and I merely ordered fomentations with the tincture of arnica and subacetate of lead, and inwardly 50 centigrammes of sulphate of quinine. The wound was simply treated.

On the following day I proceeded, with proper caution, to reduce the fracture, which was accomplished with much difficulty, on account of the conditions mentioned. I applied three splints and a bandage. As regarded the tibia, I extracted from the wound several splinters and adjusted various marginal bristlings which were causing strangulation of the tissues. The part was then washed with a strong decoction of bark, and covered with folds of lint wetted with alcohol of 21° .

On the subsequent days the state of the patient was satisfactory, due to the use of tonics, good alimentation, and the special care bestowed on him; but his indocility in bed obliged me three times to renew coaptation of the fracture of the thigh, which became solid at the end of 20 days; but I could not prevent overriding of the broken ends, and a manifest contraction resulted.

In the meantime suppuration in the wound continued, and a month after the accident the extremities of the fractured bones appeared uncovered, in consequence of which, and there being no other medical indication which could prove remedial, we proceeded with the following surgical measures":—

The writer then details the operation of resection and removal of necrosed portions of both bones, after which he states that "the wound, after being washed repeatedly with fresh water, was brought together with figure of eight sutures, and cleansing with decoctions of bark was ordered, with the treatment by alcohol before mentioned."

"I continued the use of internal tonics. The general state of the patient improved after the operation, so that in 20 days he was becoming fat,

and the solution of continuity, now sufficiently reduced, permitted us to see the extremity of the bone slightly necrosed; slight tractions with forceps brought away the diseased part, and the wound was very soon covered with granulations which brought about complete cicatrization.

On the 4th of April, two months and ten days after the operation, and three months and thirteen days from his entrance into the hospital, we discharged him in the following condition:—There was continuity of the tibia and fibula in their whole extent, without any difference in the length of the two legs, measured from the rotular tuberosity to the external malleolus. No spontaneous pain existed, nor did pressure produce any. The limb, regarded at length, showed an obvious shortening, due to the irregular union of the fragments of the femur, caused by the indocility of the patient, as before mentioned.

Observation third.—José Ruperto Us, native of Abalá, Yucatan, aged 18 years, of good constitution, a labourer; he was brought to the hospital on the night of the 20th September, 1879. From carelessness in attending a machine armed with cutting blades, his right hand was introduced into the wheel with blades, and the whole of the upper limb as far as the scapulo-humeral articulation was torn off, carrying away at the same time the external third of the clavicle and the acromion of the scapula. The textures torn, left however, a small portion of the skin of the anterior of the thorax, hanging on a level with the insertion of the pectoralis major.

On minutely examining this extensive wound, the axillary artery was seen at its origin, and a ligature of precaution was put on it; we then proceeded to adjust, as well as possible, the contused soft parts; the extensive wound was wetted with alcohol, and folds of lint moistened in alcohol were applied, and kept on by a bandage. Internally infusion of lime tree 120 and elixir of opium 2 parts to be taken, a tablespoonful every two hours. On the following day he was ordered, owing to febrile state, 50 centigrammes of sulph. quinine, and barley water ad libitum. The dressing with alcohol was continued, care being taken to keep constantly moistened with it the lint folds, and to change them every 24 hours. On the 6th day small portions of liquefied muscle and sphacelated skin began to come away, as well as small

splinters. Wine of bark was ordered internally. On the 31st of the month, 40 days after his entrance, the parts were completely cicatrized, and he was discharged.

“As we have already stated, before the year 1878, almost all our hospital patients who underwent amputation, perished under purulent infection and other accidents; but to-day we have succeeded in reducing the mortality so notably that in the past year, in the General Hospital, of 14 cases of amputation, only two ended fatally, and six in private practice all did well. In the present year, up to this date, (June, 1881,) we have had six amputations, four of the upper and two of the lower extremities, and have not had to lament any misfortune.

It is true indeed, that we had procured some improvement in the hygienic conditions, but without doubt the treatment highly contributed to our success, and we do not hesitate to recommend it to our confreres in the art, as well as to the proprietors of haciendas, where the first treatment is generally in the hands of unscientific persons.

NOTE.—Should Dr. Sauris' antiseptic prove, on extensive trial, as efficient as it seems to have been in his hands, even in the unfavourable climate of Yucatan, and the wofully defective hospital of Merida, it must be accepted as a valuable substitute for the cumbrous system of Listerism. Certainly the third case, above given by Dr. Sauri, was one well fitted to serve as a crucial test of the conservative and curative powers of the remedy recommended by him, and the process of application is so simple that the merest tyro in surgery may not fear to have recourse to it. The manufacturers of alcohol may now feel some relief to their troubled consciences.

A CASE OF INTRA-CRANIAL TUMOUR.

BY WM. CANNIFF, M.D., M.R.C.S., ENG.

(Read before the Ontario Medical Association, June 2, '81.)

The case I am about to bring under the notice of this Association may not be regarded as one of extraordinary interest, but is, I think, of sufficient practical information to warrant me to ask your attention for a brief space of time. Indeed I venture to say my opinion is, that unique, and startling

relations which any one in active practice may select for the consideration of meetings like this, will not best serve to make this Association a success, and secure that mutual advantage which the promoters of it aim to secure for the profession of Ontario. I wish to say, moreover, that my object is not to throw light, but to obtain it; and after I have related the case and the result of the treatment which, I may say, has not been marked by anything unusual, I hope to hear from those present, remarks and suggestions of such a practical nature as to afford instruction for future guidance.

The patient of whom I am about to speak has been under treatment in the Toronto General Hospital since the 19th June, 1880, where he is still an inmate. His history, as supplied by himself, is briefly as follows: Aged 31, is a native of Ontario. Since the age of 15 his occupation has been chiefly chopping and hewing timber in the woods in winter, and acting as engineer in mills and factories in summer. Up to the period when he began to work he always had good health, except an attack of scarlet fever when quite young, in connection with which there was nothing particular. In the summer of 1871 he was laid up with typhoid fever, which was prevalent where he lived, and when recovering he suffered a relapse, which was complicated with inflammation of the lungs. He was confined altogether for three months. For a few months before the fever he felt pain in the back of the neck, and easily became tired. Three weeks before the attack he had contracted gonorrhœa. In the fall of '71 he went to the woods, and continued there at work all winter, in good health. The following spring he came to Toronto, with the view of joining the Mounted Police. He passed the medical inspection, but he, with a number of others, were not required to complete the number needed. He then took a situation as engineer in a steam paper mill, where he remained four and a half years. During that time he was troubled for a while with swelling and pain in the left knee. He noticed at the same time that the leg above and below the knee was smaller than the other. The pain in the knee was at times severe, and continued to trouble him for about two years, gradually getting worse, when he had to give up work. After resting some time the knee got well, and has remained so ever since. He next took a job to clear a field of stumps, and then a contract to

build abutments for a bridge, meanwhile remaining quite well. In the autumn of '78 he went to Michigan and engaged in chopping and hewing timber. Towards the first of March he at times found himself dizzy, and if spoken to he could not reply. He "either forgot what he should say or could not get the words out." Would feel hot and a rush of blood to his head. Some days he would have to leave off work before night, but would return to it the next morning. This continued until the 9th April, when in the night he was taken with a fit while asleep. His brother, who was sleeping with him, told him afterward that he made a noise with his throat and that his body was stiff. A doctor, who was called, told him his liver was affected. After this he had great pain in his head, sometimes in the back, sometimes in both temples. He would frequently vomit, especially after eating. This continued for two weeks, when he began to get better, and in a week was out, and at the end of another week returned to work. From this time he continued working all the summer and following winter, having only an occasional headache. In the spring of 1880 he took a job to cut some ship timber, some distance from where he had been working. In going to the new place of labour he noticed a singing in his ears, and found he could not speak, except to say yes or no. If he tried to say more he would make a mistake. The next two days being Saturday and Sunday he felt all right. On the Monday he hewed timber all day; the next day, after working for three hours, he in a moment found he could not use his left arm, and that it had no feeling, but in about half an hour the arm recovered and he resumed work, and continued at it all day; but he had the singing in his ears, and discordant sounds seemed near by and intensified. The following day he had a slight return in the arm at about the same hour. He struggled to overcome the feeling in the arm, and worked on. At last, suddenly, the left arm was drawn up until the hand was at the shoulder, he then fell to the ground, the left leg having become paralyzed. He was carried to the house, while a greenish fluid oozed from his mouth. He afterwards had an indistinct recollection of what took place, but was unable to speak. In two hours' time he was able to walk, but his arm remained quite paralyzed. Gradually from day to day power returned to the arm; but to the present

day its usefulness has remained impaired. This attack, which occurred on the 12th April, 1880, was attended with nausea and vomiting. Similar fits occurred about once a week, and after each the arm for a time was completely powerless. Power of speech was usually lost, and he could not remember names. His condition improved somewhat during the month of May, but his arm was useless for work. On the 17th of June he found his way to the General Hospital. One other occurrence should be mentioned. In the month of February, 1880, while standing in the woods, a limb of dry cedar fell upon him, striking his shoulders and bending him forward to the ground. His head was not touched, and he continued his work. I should also say that about this time he noticed his left eye was affected—he saw double, and to see straight had to shut the left eye. Moreover, he felt the scalp sore to the touch in spots, with a little swelling.

When he came to the hospital he presented the appearance of a well-nourished young man, with a florid complexion. He had a dull look, and when spoken to answered in a hesitating manner, and his speech indicated partial paralysis of the muscles concerned in articulation. His memory was evidently defective. Nothing abnormal was found to exist in connection with the stomach, bowels, kidneys, or other abdominal organs. The action of the heart and lungs was natural. His appetite was not very good, but it had been generally very good, but not excessive. The eyes seemed very prominent, and the pupil of the left eye was widely dilated, nor would exposure to light affect it in the least degree. There was a slight contraction of the flexors of the left arm; the hand was partially closed, and the fingers, especially the little one, firmly flexed. He complained of a dull, heavy pain in the occiput most of the time, and occasionally of sharp shooting pain in the temples. It was some days after his admission before he had a fit. He felt it coming on and laid down. He was convulsed in the left side of the body, but did not lose consciousness; it lasted about fifteen minutes. He described the sensation of an approaching attack, as beginning in the fingers of the left hand, creeping up to the shoulder, and then passing down the side to the foot. Seven weeks later he had another fit, seemingly brought on by stooping over to pick up a child. He felt a rush to his head, tried to

walk away but fell in convulsions on the left side. The attack was of short duration. Not long after he was sitting down, engaged painting a box. The room was close and hot, and he felt the approach of a fit. But he stood up and walked out of the room and upstairs, and it passed away. Two weeks later, on getting out of bed, he experienced a shaking feeling and an odd sensation on the left side of his face, and his tongue felt thick. This lasted only for a few minutes. The last attack approaching to a fit took place last October. But he still has periods of warning, especially when he hears a sudden noise. He described it as a pricking of the nerves, particularly in the arm; and there is occasionally an involuntary winking of the eye. The pupil still remains dilated, but not so much as it was. The arm, as a whole, has mostly regained its power, but the fingers are not under the control of the will. He has been for some time employed in the hospital dispensary, which he keeps in order, and carries the medicine to the patients. He is sometimes forgetful, and gets puzzled. I omitted to mention that shortly after he came in, Dr. Reeve instrumentally examined his eyes and found well-marked optic neuritis of both eyes. Recently, Dr. Ryerson used the ophthalmoscope, and he reports: "I examined Cooper's eyes, but did not find any very definite changes. There is some pallor of the left optic disc, but it is not definitely atrophic. His vision is normal. There is diplopia above the horizontal line, indicating lesion of the third nerve."

With regard to the diagnosis: When he came under treatment, although there was much which seemed obscure and uncertain, there appeared sufficient evidence to warrant the opinion that the seat of the disease was at the base of the brain. Many of the symptoms indicated an intra-cranial tumor, or, perhaps, the remains of a blood-clot, or products of chronic inflammation. The possibility of an abscess at first was admitted. I have mentioned that he at one time had gonorrhœa, and he admitted having had it more than once, but I have failed to learn that he ever had syphilis. At first I was inclined to believe from his statements that he had contracted the disease; but the restoration of his memory and clearer statements from him do not support the view of syphilization. While many of the attacks had apparently been excited by what he called a rush of blood to the head, or congestion of the brain, it was apparent that there existed a

permanent predisposing cause of the repeated explosions. Respecting congestion of the brain, it may be well here to refer to the lectures recently delivered by Dr. Moxon, before the Royal College of Physicians, "On the Influence of the Circulation on the Nervous System." In these lectures, Dr. Moxon clearly shows that any important increase of blood in the brain is impossible at any time, even when the face and scalp are suffused; but on the contrary, that in those cases where it is commonly believed that congestion exists, the brain is deprived of the normal quantity of blood. A few of the symptoms brought to mind that form of convulsive movement known of late as "Jacksonian Epilepsy," in which the spasms are limited to one side of the body, beginning in one limb and spreading to the whole of that side. This, Dr. Hughlings Jackson regarded as irritation of motor convolutions functionally related to the corpus striatum. But the same careful observer has pointed out the connection between unilateral fits with double optic neuritis and new growths involving the brain. And Dr. Bramwell, of Edinburgh, says that it is a most important practical fact to remember, that double optic neuritis is the most important of all symptoms of intra-cranial tumor, while headache is second in importance, and nausea third.

As to treatment: Absolute rest of body and mind was for some time strictly enjoined, and when he, from time to time, undertook to do anything, the warning symptoms clearly showed how necessary it was for him to have complete rest. At first he had only bromide of potassium, in doses of grs. xv., every six hours. After a few weeks, he had in addition iodide of potassium grs. v. per dose. On the 29th September the iodide was increased to grs. x. three times a day. October 22nd, proto-iodide of mercury was ordered, which in a week's time caused tenderness of the gums, when it was discontinued. The iodide and bromide were then resumed, grs. x. and xv., and these he has continued to take up to the present. In September a seton was introduced at the back of the neck, where blisters had previously been applied. He felt great relief from the seton, and it remained in for two months. In December, at his own request, another seton was placed in the neck, from which he again found great relief from pain in the head.

I omitted stating that the patient says he rarely takes alcoholic drinks, and never had been using them immediately before any of the attacks.

I may say that the iodide of potassium has been used with the view of promoting absorption of any adventitious material, whether specific or otherwise, and the proto-iodide likewise. I was led to employ the seton from experience acquired many years ago when house surgeon in a New York hospital, where in a number of instances of chronic brain affections, probably of a syphilitic nature, the use of the seton was followed by marked relief and ultimate recovery.

ON ABSCESS OF THE BRAIN, IN CONNECTION WITH DISEASE OF THE EAR.

BY G. S. RYERSON, M.D., L.R.C.P. & S., EDIN.,
LECTURER ON DISEASES OF THE EYE AND EAR, TRINITY
MEDICAL COLLEGE, TORONTO.

(Read before the Ontario Medical Association, June 2, '81).

MR. PRESIDENT AND GENTLEMEN,—I propose in the following paper to point out the serious turn which common cases of aural disease may, and not infrequently do, take, and will relate a case which well illustrates the symptoms and course of this grave malady. I wish it also to serve as an argument in favor of more earnest and faithful study of ear diseases by our students, and I think I cannot better "point the moral and adorn the tale" than by reading to you the notes of the following case.

On April 1st, 1880, I was called to see Master C., æt. 3½ years, in consultation with Dr. Temple of this city. He had been attended for some time, as well as his mother, by another practitioner, and upon the death of the mother, the family called in further advice. It appears that the child had been complaining for some days of his ear, but not much attention had been paid to him, owing to the apparently more serious condition of the mother. Upon her death it was found that the boy was very ill, and when called in, I found the following state of things: The child was pale and wasted. He lay in a state of coma, with ptosis of the right eyelid, divergent squint and dilatation of the pupils. He had been complaining of severe pain in the left ear for some days, in fact, screaming with the pain. He was recovering from scarlatina. Upon examining the ear with a mirror, I found the left membrana tympani bulging to the greatest extent. The apex looked like a drop of fluid. I perforated it at once, and this was followed by the escape of a considerable quantity of bloody serum and by

great relief of the symptoms. Respirations became slower, pulse 120, temp. 106°. Next morning the patient was conscious. No pus had escaped from the ear as yet, only bloody serum. Pain in the head much less.

On April 5th, discharge had become purulent. He complained of pains in his arms and legs. These continued to annoy him a good deal during the remainder of his illness. The child was much worse on April 8th. Pain in mastoid with tenderness on pressure, the veins over it being enlarged. Has intense pain in the head. The frontal vein stands out like a cord on his forehead. We decided in consultation to trephine the mastoid, which I accordingly did. No pus escaped, but a brownish, grumous fluid. The periosteum was found detached and discolored. This procedure gave great relief for some hours. He sat up and eat some oranges. Next morning, was much better. He had slept well. Ptosis almost gone. He has little or no pain in the head. Profuse offensive discharge from the ear; no fever; skin cool and moist. He is quite sensible.

On the 10th, he complained that he could not see his nurse properly. The pupils are dilated, but contract somewhat with strong light. With the ophthalmoscope, both optic discs are found to be greatly swollen, the margins indistinct and "woolly"; veins greatly enlarged and tortuous; arteries tortuous and buried in the swollen tissue. From this time I felt no further doubt as to the presence of a cerebral abscess and of the ultimate termination of the case. I opened a small abscess on the arm and on left auricle.

The night of the 12th was a bad one. He screamed almost all night. Discharge from ear lessened; somewhat feverish; he was delirious during the night; has a small abscess on his back; pain in the right knee. On April 21st he had severe rigors. His neck was much swollen at about the centre of the sterno-mastoid muscle. I could detect no fluctuation. The child died about 11 p.m. on the 22nd.

Next day, with Dr. Temple, I made a post mortem examination of the head. The dura mater was found much thickened and adherent to the calvarium; on its division, much clear serum escaped. The brain, which was very fine and large, was very much congested, more on the left hemisphere; the ventricles were full of serum. Beneath

the pia mater, over each superior lobe, was a small collection of degenerated pus. Extensive caries of the roof of the tympanum and sulcus lateralis was found. A pair of closed forceps could be passed from the mastoid perforation directly through the sulcus lateralis. Hence it is probable that the trephination relieved the brain directly. The lateral sinus was full of clots and pus. The dura mater was extensively detached, and beneath it much pus was found.

This case is especially remarkable, for two reasons, viz.: (1). As an example of abscess on the brain following *acute* inflammation of the ear. (2). By reason of the remoteness of the collections of pus in the brain from the ear. Abscess of the brain from aural disease most frequently follows chronic discharge which has lasted for years; as following acute otitis, it is very rare. Toynbee mentions one case, and St. John Roosa, in a table of 40 cases, another.

The abscess is usually found in the middle lobe of the brain, but is also met with in the pons varolii, and cerebellum occasionally. It may be separated by some considerable thickness of healthy brain tissue from the tympanum, but it is seldom found on the convexity, as in this case. It is probable that it was conveyed by the veins, as there was pus in the lateral sinus; and there were symptoms of pyæmia, abscesses in various parts.

Ear disease is the commonest cause of abscess of the brain. Gull and Sutton, in "Reynold's System of Medicine," record it as the cause in 25 out of 76 cases, or about one-third. Lebert says, "one-fourth of all cases of abscess of brain are due to aural disease."

With regard to its relative frequency, George Field, of London, states that in 500 cases of perforation of the membrana tympani from all causes, he had four deaths from cerebral abscess, or about one per cent. of cases of disease with perforation.

A feature which was wanting in my case was epileptiform seizures. This is frequently the earliest symptom that arouses suspicion of serious disease, although its onset is often very insidious. Headache was well marked, the patient screaming, "my head, my head," as was also the nocturnal exacerbation of pain. The discharge is usually very offensive and often ceases or greatly diminishes suddenly. The occurrence of double optic neuritis was a diagnostic sign of great value.

Hughlings Jackson has ably pointed out the necessity of frequent ophthalmoscopic examination in all cases of obscure head disease. "Coarse" disease, *i.e.*, tumors, abscesses of brain, etc., is almost invariably accompanied by double optic neuritis.

The treatment is expectant. Ice to the head for pain; narcotics to obtain sleep, and complete quiet and rest are the main factors. An abscess may become encysted and remain stationary for an indefinite period.

A word of warning and of exhortation, and I have done. No case of chronic discharge from the ear should be considered as of no consequence. The periodical press teems with cases of abscess of the brain, in which it is incidentally noted that the "patient had discharge from the ears for years." No person is safe with a suppurating tympanum. It only requires a blow on the ear, or extra exposure to cold, and the business is settled. The English insurance companies fully recognise this, inasmuch as a man with chronic discharge is ineligible. Students should devote more attention to this important branch. They have plenty of opportunities and instructors now, and we will hear less of death from abscess of the brain from disease of the ear.

NOTES OF A CASE OF EMPYEMA.

BY H. P. YEOMANS, M.D., MOUNT FOREST, ONT.

(Read before the Ontario Medical Association, June 2, '81).

The case, of which I propose to give you a brief outline, presents no new features either in symptoms or in principles of treatment. My object in introducing it on the present occasion is to elicit the opinions and ascertain the experience of those who have encountered similar cases.

Feb. 7th. A farmer, *æt.* 45, who had always been healthy, of regular, industrious and temperate habits, complained of a pain in the right scapular region. Said he had felt a dull aching pain in this region for about a week, during which time he had been confined to the house. The greater part of the past two days had been spent in bed. There was a slight cough, so slight as to excite in his mind no apprehension of lung trouble—no pain while taking a long breath—felt weak and short of breath while making any exertion. For the past

two months he has been more languid than usual, remaining in bed late in the morning. Could only attend to light work about the barn. When I first visited him at his house I found him sitting in a chair; said he had no chills, but had been gradually getting worse. Pulse 100; temp. 100°.

Physical exploration of the chest indicated effusion in the right thoracic cavity, dullness and absence of vesicular murmur extending as high as the nipple.

Feb. 8th. Second visit. Felt much worse last night; perspired considerably and coughed frequently—a dry, short, irritating cough. I introduced a No. 2 aspirating needle (Dicalafoy's) between the 7th and 8th ribs, about two inches to the right of the inferior angle of the scapula, and drew off three pints of most offensive pus, greyish yellow color, and so exceedingly offensive as to be almost intolerable.

Feb. 9th. Came again, about same time as the day before, and found physical signs of effusion as great as ever. I then introduced the aspirator needle in the same place and obtained five pints of pus, quite as offensive as that procured at first.

Feb. 10th. Made an opening at the point where the aspirating needle had been previously introduced and inserted a drainage tube. I endeavored to treat it antiseptically now with the best means at my disposal in an emergency. The opening was made under carbolic spray, produced by an ordinary steam atomizer. The cavity of the chest was washed out with a carbolic acid solution of 1 in 20, to which a few drops of tincture of iodine had been added. A piece of lint soaked in glycerine and carbolic acid was applied immediately over the wound and the open end of the tube. Absorbent cotton, showered with the carbolic spray, was laid over this, and the whole chest encircled with several layers of cotton wool. After this I continued to wash out the chest every day and re-apply the dressing in precisely the same way each time. At each dressing the pus appeared lessening in quantity and becoming healthier and purer.

Feb. 17th. Little or no pus had appeared for two days previous. I withdrew the drainage tube and placed it in a bottle of carbolic acid solution. The tube appeared quite clean and free from offensive smell.

Feb. 18th. Inserted the tube again with the

intention of washing out the chest, and found a few drops appearing at the mouth of the tube. The temperature, which had been ranging from 99 to 102½, did not rise above 100 on the 18th. The pulse, which had been less than 100, rose to 120. No more pus appeared after washing the chest each day again, until the 21st, when a small quantity appeared to have passed out of the tube during the night previous.

Feb. 22nd. The pus had increased in quantity and was more offensive. The progress of the case was after this very unsatisfactory, continuing from bad to worse, notwithstanding all efforts to arrest the disease, until the patient became exhausted, and died March 13th. Nourishment and tonic treatment were continued from the first.

In looking over my notes in this case, I find that the temperature did not rise higher than 101½, from Feb. 7th to 25th. Each day the thermometer recorded irregular variations, sometimes higher in the morning and sometimes higher in the evening:—Feb. 7th to 18th, 98½ to 101½; Feb. 18th, 100; Feb. 19th to 23rd, 98½ to 99½.

Correspondence.

CARBOLIC ACID IN WHOOPING COUGH.

To the Editor of the CANADA LANCET.

SIR,—A few weeks ago I had several patients suffering with whooping-cough, and having administered the usual remedies without getting the least benefit, I commenced giving carbolic acid and glycerine, in small doses, repeated every hour. I am glad to say the results were very satisfactory. The paroxysms of coughing and the vomiting, which in some cases were very severe and frequent, were reduced almost to a minimum in less than twenty-four hours. For a child three years old I give the following :

R. Acidi Carbolici.....grs. iv.
Glycerini.....3 iss.
Syr. Simp.....3 iv.
Aque ad.....3 ij.—M.

SIG.—A teaspoonful every hour.

Yours truly,

J. BAUGH, M.D.

London, October 4th, '81.

Reports of Societies.

NEWCASTLE AND TRENT, QUINTE AND CATARAQUI MEDICAL ASSOCIATIONS.

A joint meeting of the Newcastle and Trent, and Quinte and Cataraqui Medical Associations was held in Napanee on the 5th ult. The following medical gentlemen were present:—Drs. Platt, Wright, and Evans, jr., Picton; Drs. Burdett and Eakins, Belleville; Dr. Bowerman, Bloomfield (secretary); Dr. Hamilton, Port Hope (secretary); Dr. Beeman, Centreville; Drs. Metcalf (medical superintendent, Rockwood), Lavell, C. H. Lavell, M. Oliver, and Henderson, Kingston; Drs. Beeman and Meacham, Odessa; Dr. Knight, Tamworth; Drs. Ruttan, Bristol, Leonard, Ward, Clark, Edwards, Brown, Napanee; Dr. Lavell, Newburgh; Dr. Riddel, Baltimore, and Drs. Day and McLellan, Trenton.

In the morning the Quinte and Cataraqui Association held a preliminary meeting and adopted a constitution.

The joint session was called to order by Dr. Lavell, who occupied the chair, and briefly stated the object of the meeting, and made certain explanations in regard to the constitution, powers, etc., of the Medical Council of Ontario.

Dr. Ruttan presented an interesting case of "Bright's disease," and a synopsis of the treatment adopted, which was followed by a general discussion.

Dr. Beeman, Centreville, read an excellent paper on the treatment of "Post Partum Hæmorrhage by the use of Hot Water." A lengthy and animated discussion followed, in which Drs. Lavell, Ruttan, Bristol and Platt took part.

Dr. Ward presented (with patient) an interesting case of "Torticollis," after which an adjournment was made for dinner, at which the Napanee members entertained the visitors at the Campbell House.

After dinner, business was resumed. In the absence of Dr. Lavell, Dr. Ruttan took the chair.

Dr. Hamilton, of Port Hope, read a concise but interesting and practical paper on "Epistaxis." This was followed by a discussion, in which Drs. Day, Ruttan and McLellan, of Trenton, and others joined.

Dr. Brown related the particulars of an interesting case of complete inversion of the uterus following labor.

The members of the two associations number about 200. The next meeting will be held in Belleville, on the first Wednesday in February next.

MICHIGAN STATE BOARD OF HEALTH.

The regular meeting of this Board was held at Lansing, July 12th, all the members being present. Hon. Le Roy Parker was elected president of the Board for the ensuing two years.

Dr. Jakes, Kellogg and Avery reported an outbreak of small-pox at Pontiac, Battle Creek and other places, the disease being conveyed by immigrants.

A communication was received from the American public health association asking the influence of this board to secure legislation, making it a criminal offence for any person to communicate any communicable disease, such as small-pox, scarlet fever or venereal diseases, and giving to boards of health and health officials the same power in the prevention and suppression of other diseases as they now possess in cases of small-pox.

The secretary Dr. Baker presented a resolution of the American public health association, asking the Michigan board to use its influence to secure general vaccination.

The action of the sanitary conference, held at Chicago, June 29 to devise means to prevent the spread of small-pox, was endorsed, and resolutions were adopted requesting the national board of health to secure, if possible, the vaccination of immigrants before they land in this country; asking local boards of health in Michigan to secure a careful inspection of all immigrants entering and remaining within their jurisdiction, and a prompt vaccination or revaccination with pure and fresh bovine virus of all persons not protected against small-pox; and calling attention to the need of establishing a quarantine at Port Huron.

Dr. Lyster, committee on epidemics and other diseases, read a translation of two important papers recently published in France, on the "Causation of Certain Communicable Diseases," which gave details of successful methods of making viruses, which can be used in vaccination, and which are effective in preventing deaths from these diseases.

Dr. Baker mentioned a paper by Prof. Law of Cornell university, suggesting that these productive viruses all seemed to be made in accordance with a general law, namely, by their cultivation in fluids with access of free oxygen, and this gives us

great hope of soon being able to make protective vaccination for many of the most dangerous diseases in animals and mankind.

Dr. Baker reported the investigation of an outbreak of a new disease in England, traced to the eating of American hams. The cause of the disease proved to be a virus, which was used to inoculate animals of various kinds and reproduced the same disease in them. From the accounts it seems probable that it is no more nor less than our hog cholera. The symptoms closely resemble in some respects the disease known last winter in this country as "winter cholera."

Dr. Jakes referred to the Pontiac Sanitary association and the work it was doing for public health in that city.

Dr. Kellogg reported the formation of a Sanitary Association at Battle Creek, as a fruit of the recent Sanitary Convention held there by this Board.

Documents on the restriction and prevention of diphtheria; also on the best methods of disinfection, and the treatment of the drowned were ordered to be printed and distributed.

Dr. Baker was instructed to prepare a paper on the best methods of constructing hospitals for communicable diseases avoiding the use of the name "pest house."

Under the new appropriation made by the recent legislature, the board authorized the purchase of additional meteorological instruments for the use of the board's observers in different parts of the state.

The Secretary's report showed that the number of health officers appointed for the present year was 936. The compilation of the annual reports from these officers is now in progress.

The usual number of complaints have been received of sickness caused by flooding rivers, for the purpose of running logs in the northern part of the state. In answering these the secretary has used Mr. Parker's paper on the powers and duties of local boards of health.

The fee for examination in sanitary science was changed from \$10 to \$1, the latter sum being deemed sufficient to cover the actual expense. It was voted that applicants unable to be present at this meeting may be examined at the meeting of the Board, October 11th, 1881. Application to be made to the secretary at Lansing.

The secretary presented samples of notices of contagious and infectious diseases sent by the

health officers of Grand Rapids and Tecumseh to the superintendents of schools in those cities, and suggested that if the health officer of each city would send such notices to superintendents, it would be a very important health measure.

An account of an experimental boiler explosion, by D. T. Lawson was presented. His view is that they can be prevented by such a construction of the boiler as will stop the too rapid increase of steam under suddenly reduced pressure, as at starting the engine, or by the sudden introduction of cold water. Results thus far seem to demonstrate the correctness of his theory.

After auditing bills and accounts, etc., the Board adjourned.

GLENGARRY COUNTY MEDICAL SOCIETY.

The above Society held its quarterly meeting at Alexandria on Tuesday the 13th of September.

The president having taken the chair, the resignation of Dr. McDonell as secretary was presented, and accepted.

"It was then moved by Dr. Harkness, seconded by Dr. McDermid that Dr. Chisholm of Alexandria, be secretary in the place of Dr. McDonell. *Carried.*

Dr. McMillan reported a case of Vomiting of Pregnancy, in which minim doses of vin. ipecac succeeded after all other measures at his disposal had failed.

Dr. McDermid, Dunvegan, noted a case of "Double Placenta" occurring in his practice, his attention being drawn to the existence of a second by some membranes protruding from the vulva after the first placenta was removed. The cord was of unusual length and bifurcated within a few inches of the placentæ.

Dr. Munroe read the notes of a case of "Hemorrhage between the Amnion and Chorion," occurring about the third month of utero-gestation, causing great enlargement of the uterine tumor, and considerable difficulty of diagnosis.

Dr. Harkness mentioned a case which had been diagnosed as "Cancer of the Liver" which in a *post mortem* by himself and Dr. Falkner, proved to be cancer of the omentum displacing the liver.

TORONTO MEDICAL SOCIETY.

The Society met July 14th, the President in the chair. The minutes of the last meeting were read

and approved. Dr. Sheard exhibited a specimen of aneurism of the abdominal aorta, also the heart from the same case, which weighed 19 ounces; it was hypertrophied and dilated, with vegetations on the aortic and mitral valves, and atheroma of the aortic arch. The patient from whom this specimen was taken was syphilitic, the kidneys were congested, and the liver nutmeg. The same gentleman also exhibited a portion of the lower end of a femur, which showed a spiculum of bone projecting from the internal condyloid ridge, just where the femoral artery passes into the popliteal space. There had also existed in the same case an aneurism of the popliteal artery, supposed to have been brought about by the artery having been punctured by the spiculum of bone.

The discussion of Dr. Graham's paper on Leucocythæmia was then taken up, which partook of a conversational form.

Dr. J. S. King was elected a member of the society.

Dr. Workman then read a paper upon "Animal Magnetism." He spoke of the functions the various nervous systems played in the hypnotized person. He gave the methods of inducing and relieving hypnotism, and spoke of its relation to hysteria. He mentioned some very interesting experiments, as performed by Charcot and others, and spoke of the effect of hypnotism upon the senses; its application to surgery in place of ether and chloroform was not successful. He also related some of the phenomena produced by suggestion in the hypnotized person.

Sept. 22nd.—The Society met at 8 p.m. the president in the chair. After the reading of the minutes, Dr. Sheard exhibited a liver in which there existed two large hydatid cysts, the right one the larger of the two, communicated with the duodenum. The patient, prior to her death had been passing hydatids by the bowels. In the same patient, in the region of the right ovary there existed an independent cyst, having no communication with the other cysts in the liver or any of the viscera. It contained hydatids in its interior.

Dr. Nevitt showed a fleshy mole; it was a perfect cast of the uterus, and consisted of fibrine. There was no muscular tissue in its composition.

Dr. Nevitt then read a paper upon "Pertussis." He related the history of the disease and the derivation of the name. He considered it one of

the most contagious and fatal of diseases, and referred to the early age at which the disease may occur. He referred to a case in his own practice where the disease showed itself shortly after birth. He thought there existed a distinct ratio between the prodromic stage of the disease and the disease itself. He gave instances where death occurred from complications. The treatment is by the administration of belladonna, chlorate of potash, chloral hydrate, and quinine, with the exhibition of inhalations and maintaining the strength.

Drs. Workman, Covernton, Canniff, and others, took part in the discussion upon the paper.

Dr. Oldright mentioned a case of atrophy of the scapular muscles, in which he ordered tonics and electricity; and also of incontinence of urine, where the administration of belladonna to its full effect had failed to prove serviceable.

Dr. Geo. Wright mentioned a case of chancre of the lip, in which the patient neglected the treatment ordered, and the secondary symptoms showed themselves.

Dr. Cameron referred to a case of lacerated wound of the face from the kick of a horse, also a saw wound of the hand, where primary union had taken place under the lead and spirit lotion dressing.

Dr. Macdonald mentioned a case of parturition in which there was complete rupture of the perineum extending into the rectum, which united without any surgical interference.

Selected Articles.

PRESIDENT GARFIELD'S WOUND.

[We give the following extract from an article on the surgery and pathology of President Garfield's wound, by Geo. F. Shrady, editor of the *Medical Record* :—]

The case of the late President Garfield has, from its purely surgical aspect, interested every member of the profession throughout the civilized world. Never before has a wound been studied with more care, from the meagre and unsatisfactory data heretofore obtainable, and never before has the accumulated experience of surgeons been more directly applied and more anxiously concentrated upon the welfare of any one patient. The reasons for this are too obvious to mention here.

Having had unusual opportunities for studying the case with Prof. Faneuil D. Weiss, of this city, we having been invited by Dr. W. Bliss to ex-

amine the morbid specimens in the Army Medical Museum, at Washington, it seems incumbent upon me that I should, from certain pathological and surgical standpoints, make a direct and unbiassed statement.

It cannot be expected that, under the circumstances, a detailed history of the President's case will be given. Such necessarily has been done by the surgeon in charge, who, by actual presence at the bedside, is the only one who can speak with authority concerning the symptoms presented. Nor would I presume at this time to add to the already extensive literature of the subject, were it not considered necessary to do so by the gentleman who so kindly gave me every facility for examination, and who has deemed it a duty which I owe to the profession.

It is proper that I should speak only concerning those points of which there is a direct knowledge on my part, and offer such impressions as are founded thereon.

It is well established by the autopsy that the ball entered four inches to the right of the median line in the tenth intercostal space, and passed forward and downward, impinging upon the 11th rib about three and one-half inches from the median line of the spinal column. The missile was then deflected to the left and downward, grazing the twelfth rib, which it fractured, and, continuing its course, entered the right side of the intervertebral fibro-cartilage between the twelfth dorsal and first lumbar vertebrae.

The ball then passed through the upper half of the body of the first lumbar vertebra, emerged on the antero-lateral face of the body of the same vertebra, half an inch to the left of the median line, thus throwing the track of the missile forward. Thence it passed behind the pancreas and lodged at the inferior border of the left external third of that organ. In its course behind the pancreas the ball wounded the trunk of the splenic artery. No vital organ was injured. The wound of the splenic artery gave rise to a traumatic aneurism which undoubtedly commenced to form immediately, and it was the final rupturing of this sac into the peritoneal cavity which, as is now well known, caused the death of the patient, and satisfactorily explained all the symptoms during the last hours of his life.

The ball was thoroughly encysted, and the portion of the track adjoining it, for a distance of an inch, was completely closed. The position of the blood-sac evidently accounted for both of these conditions. This aneurism, situated to the left of the spinal column, and between the latter and the ball, apparently pressed upon that portion of the track next the missile and closed it. At the same time, as can be easily understood, the sac-aneurism was thus placed in the direct track of the ball. This is certainly a very significant fact in connec-

tion with the probably fatal results in case any extensive exploration of the bullet-wound had been attempted. The aneurism was lined by concentric layers of fibrine which showed nature's efforts to obliterate the sac in the usual manner.

The evidences that the sac had not formed recently were made clear by a study of its pathological conditions. The opening in the splenic artery was on the superior and posterior aspect of its tortuous trunk directly in the track of the ball. The edges of this opening were sharply defined but were gradually bevelled to be incorporated with the walls of the attached blood sac. This condition would indicate that the coats of the artery were cut completely through during the transit of the ball, and were not merely grazed and afterward opened by ulceration. It would thus appear that the aneurism was formed immediately after the injury and at that time attained its full size. Besides, the sac itself was evidently of long formation, as was shown not only by the firm condensation of its tissue and its intimate attachment to the edges of the cut in the artery but the number and apparent age of the concentric layers lining it. The burst portion of this sac was on its left anterior aspect, where not only its walls, but the different concentric layers were thinnest. The immediate invitation for this rupture was the degenerated condition of that portion of the sac, as indicated by progressive and destructive changes in its tissues. It is quite probable, as suggested by Dr. Bliss, that the blood escaping from this sac, did not at first find its way into the peritoneal cavity, but that there were distinct hemorrhages into the adjoining tissues, at stated intervals, until the blood ploughed its way forward and to the left, finally escaping into the peritoneal cavity. On this supposition, the occurrence of the intermittent pains in the side, likened by the patient to those of angina pectoris, is, as expressed by Dr. Bliss, very satisfactorily explained.

The body of the first lumbar vertebra presented the appearances of carious degeneration in the course of the wound, and, as far as could be judged by an examination of the dried specimen, the intervertebral cartilages above and below it were involved in the same necrotic process. The spinal canal was not involved in the injury. It was stated to me that the shattered eleventh rib had firmly united. This bone was unfortunately not preserved. The twelfth ribs were, however, intact, and had been removed along with the last dorsal, first, and second lumbar vertebrae. The broken portions of the right twelfth rib were firmly united by bone. As the liver had not been saved, the relations of the abscess to it and the surrounding parts were not demonstrable. It was stated, however, that the abscess was situated, as has already been described in the official autopsy, and that it was a closed sac of pus behind the peritoneum.

Professor Weisse very ingeniously explained its presence there as a direct drainage in front of the right kidney from the lesion of the spine. This collection of pus at no time had, as far as could be learned, any direct connection with the external wound, although Dr. Bliss entertained such impression from the fact that at times a different character of pus was forced by pressure upon the abdominal walls from the orifice of the supposed track of the bullet.

In the following detailed history of this remarkable case, no significant symptoms were discoverable that would point to the injury of the spinal column as found at the autopsy, save the symmetrical involvement of the nerve-origins by the concussion of the ball. When the first bulletins announced that the President had been shot near the spine, and that there were attendant nerve-disturbances in the lower extremities, a natural and legitimate inference was an injury of some kind to the spinal cord. But when the nerve-symptoms in the lower extremities disappeared there was, for good reasons, a good diagnosis made.

As to the question of septic infection, about which so much has been said, it is well enough in this connection to recognize the fact that there are three principal grades or types of fever that follow the receipt of wounds. A mild form, known to all hospital surgeons, as *traumatic fever*. It occurs early in the history of the case, runs an acute course usually in a few days, and rarely occupies a week. Its phenomena are notably those connected with any high fever, and fatal results are not common. Then we have simple *septicæmia*, so-called, which is usually associated with the idea that some decomposing organic substance has found its way into the blood. In such cases the wound, if visible, exhibits an altered character. It is apt to be humid, swollen, and may be gangrenous. The fever is persistent, with corresponding rise in temperature. The pulse is constantly frequent, and more or less sweating is present. There are occasional attacks of mild shiverings, there may be vomiting, and often there is a profuse diarrhoea. At post-mortem examination there is nothing found which may be regarded as characteristic. The spleen is apt to be enlarged and softened, and so too the liver and kidneys. The blood also coagulates imperfectly. Exceptionally, in long-continued cases, there are said to be emboli in distant parts, with resultant abscesses. It is known to us in connection with dissection-wounds.

The third grade or type is what is known among hospital surgeons as *pyæmia*. In reality, the term is an incorrect one, and should not be used. Much better would it be to designate the condition as one of metastatic septicæmia. It is characterized by intermittent rigors, in which the

temperature rises from three to five degrees, and then ascends still higher during the fever, but falls during the sweating, all of which phenomena follow one another much as in the case of ague.

These exacerbations have no periodicity as in ague. They occur at any time of day or night, at first often with long intervals, and then with short intermissions. The duration of the disease depends much on the nature of the accident, the strength of the patient, and the activity of the treatment. He may survive but a few days, or many months, in which latter case the disease may be classified as chronic.

Circumscribed abscesses are found in the internal organs; or, if the disease has been very acute, these abscesses may be diffuse. When such an affection is established, the pus becomes scanty, thin, and altered in color, or it may be arrested altogether for a time; wounds or abscesses show little tendency to heal; the skin is apt to be bathed in a peculiarly sticky sweat, and the breath has a characteristic sweet odor. Marked prostration follows each exacerbation, and the patient sinks to a lower level of vitality, in which attacks of delirium are not uncommon.

It remains to decide to which class the President's case belonged. It was evidently not a case of traumatic fever, nor could it be classed with the milder form, called simple septicæmia.

From a careful study of the symptoms in connection with the examination of the autopsical lesions, the conclusion seems inevitable that the case was one which, commencing as the milder form of septicæmia, gradually developed into the graver metastatic variety, or that generally understood as chronic pyæmia. It is apparent that the lines of distinction between the latter conditions cannot be clearly drawn in President Garfield's case; but it must be admitted that the weight of evidence is on the side of metastatic septicæmia, clinically and pathologically. In fact, it is safe to assert that the symptoms pointed so directly toward the existence of this condition, that it was a matter of great surprise that more metastatic abscesses were not discovered at the autopsy. The assumption in favor of metastatic septicæmia would be satisfactorily proved by the abscess of the kidney and the multiple abscesses in the parotid, which were within the capsules of the respective organs.

Knowing the facts, as demonstrated by the pathological lesions revealed in the President's case, each surgeon is qualified to judge as to the practicability of making extensive explorations of the wound, and as to the propriety of removing the ball by operation. It is well to consider at the start that the bullet, as such, had no immediate influence upon the progress of the case, and that the real causes of trouble were connected with the conditions of the track, viz., the broken ribs, the

lesions of the spinal column, and the existence of the aneurismal sac. But if the exact location of the missile had been known, and under the supposition that its presence was a source of irritation, the necessary exploration had been made, the probe would have perforated the traumatic aneurism, and the almost instant death of the patient would have been the result. From the position of the wound and the attendant conditions through drainage at the inguinal region was impossible, and its employment as a means of treatment would, in all probability, have added an extra complication.

From my personal examinations of the pathological specimens, and as the result of an extended and careful study of the history of the case, with every opportunity for examination of details, I am convinced that the treatment of the President was judicious and skilful from the time he was first visited by the physicians in charge until his weary struggle for life was at an end.

TREATMENT FOR CERTAIN KINDS OF INCONTINENCE OF URINE IN WOMEN.

BY J. MILNE CHAPMAN, M.B., M.R.C.S.

Mrs. C., æt. 48, frequent and painful micturition, which had lasted $3\frac{1}{2}$ years. When first ill a doctor told her she had inflammation of the bladder and some urethral affection (caruncle?), for both of which he treated her. Sept. 30, 1880, could only retain water half an hour. The pudenda were reddened, also the whole vagina. Urethra somewhat gaping at its outlet. There was considerable pain on rubbing the two walls of the bladder over one another, or on introducing the sound into the viscus. Urine turbid, acid, and contained pus cells, bladder epithelium, and some oxalates. Urethra was dilated by the finger, increasing the bladder's retaining limit to $1\frac{1}{2}$ hours. Nux vomica and uva ursi were given and the vaginitis treated by sedative applications. Effects of the dilatation disappeared in about three weeks, it was then repeated, but soon she relapsed into former condition, minus, however, the pain, and pus in the urine. Urethra examined by endoscope and a slight redness noticed. Iodoform bougies were used. Condition of bladder wall, as seen by the endoscope was normal, and now (Nov. 8) every hour, day and night, she had to empty her bladder. Total quantity of urine 50 ozs., which gave little more than 2 ozs. at each micturition. Sound passed into the bladder 3 inches from external meatus, and could only be pushed half an inch farther, and thus pain was caused. It occurred to me that gradual forcible dilatation of bladder might relieve patient. The bladder was distended with warm 2% carbolic solution, and quantity used measured

4 ozs. Any attempt to inject more caused most intense pain, and the resistance was great as could be felt in compressing the ball of the syringe. From this date bladder was filled to distension daily, injection being stopped when pain became great and resistance reached a high point. The apparatus used was Higginson's syringe attached to an ordinary catheter, care being taken to prevent the access of air to bladder. Each day there was a gradual increase in the amount injected of from a drachm to an ounce. On two or three occasions the fluid as it returned was tinged with blood, but no harm ensued. Dec. 20 she was discharged. Instead of micturating every hour, she had only to get up once or twice during the night. Sixteen ounces could now be injected and less pain was caused than when four ounces was the limit. Two months later, well as when she left hospital.

It will be seen that the woman had a cystitis, with frequency of micturition, which latter remained after the former was cured; that any indication there was for further treatment was attended to either medicinally, topically or by operation, but that still the frequent micturition continued; that the bladder was then found smaller than normal, both by measurement with the sound and by the much more certain method of measuring its capacity, and that this capacity was increased fourfold by what may be called *slow operative dilatation of the bladder*, and that the results were in all respects satisfactory. There has this week presented itself at the Infirmary a case of cystitis, where the bladder capacity is three ounces, and we propose soon to begin dilatation.—*Edinburgh Med. Jour.* June.

VALUE OF EARLY AND REPEATED PARACENTESIS IN ASCITES DUE TO CIRRHOSIS OF LIVER.

BY W. A. DUNCAN, M.D.

Treatment of ascites due to cirrhosis of liver, by early and repeated tapping, does not receive the attention it deserves; nor is it advocated in standard medical works—with, however, two notable exceptions.

Mr. M., æt. 46. Father died of cancer of the stomach, æt. 49; mother from bronchitis æt. 71; one sister of paralysis, æt. 48, and another of consumption, æt. 18. He had had measles, scarlet fever, and whooping cough. Went to sea when ten years old. Served in the Burmese war, where he received seven wounds; besides which, suffered from cholera, dysentery, and slight sunstroke. In 1854, went to the Crimea, and served all through the war, having ague and Crimean fever. In 1857, had another attack of sunstroke whilst in Bombay. In 1862, had a sharp attack of fever and ague. In 1874, he had another sunstroke; after which he left

the sea. Had always been a very moderate drinker, taking on an average, one or two glasses of rum daily. He never had jaundice, piles, or morning sickness. In 1875, had an attack of pleurisy on the left side. During 1876 and 1877, he suffered intensely from neuralgia and sciatica, during which time he took from half a pint to one pint of brandy daily, to enable him to bear the pain.

Present illness began the early part of 1879, with a cough, morning sickness, anorexia, and general debility. About the end of March, he noticed that his belly began to swell; and, on making an examination, fluid was detected in peritoneal cavity. Liver-dulness extended from the sixth-rib to a little below the margin of the ribs. On the left side, the spleen extended down to the level of the umbilicus, and anteriorly to within an inch of the median line. Patient said his spleen had been large since the last attack of ague in 1862. The ascitic fluid gradually accumulated until May 3d, when paracentesis was performed with the usual trocar and canula, and seventeen pints of straw-coloured serum were removed. Previously to the operation, there had been no dyspnoea nor oedema of the legs, and but little discomfort. No bad result followed. May 14. Paracentesis was again performed; this time with Southey's trocar and canula. The fluid continued to flow for eight hours, and amounted to twenty pints. May 24. Was again tapped; and after six and a half hours, sixteen pints had escaped. The fluid did not reaccumulate so rapidly, and tapping was not again had recourse to until August 11, when, after seven hours, fifteen pints were removed. Sept. 11, he was again tapped; and only three pints removed. After the operation, a slight attack of peritonitis ensued, but soon subsided under morphia. Sept. 25, was again tapped, but only one pint was removed, as patient felt very faint. Oct. 3, eight pints were removed in five hours. Had severe pain in back; feet and legs puffy for the first time. Nov. 9, three pints were removed in four hours; 25, six pints in four and a half hours; and Dec. 6, six pints were removed with a large trocar. Much weakness followed, with some peritonitis and a troublesome cough. Some fluid was detected in both pleuræ. Feet and legs were much puffed. Dec. 21, four pints removed in nine hours; Jan. 2, 1880, ten pints in seven hours; 21, eighteen pints in seven and a half hours; Feb. 9, nine pints in eight hours. March 14, eight pints removed in four and a half hours; April 6, six pints in seven hours. April 24, tapping again required; but no result followed insertion of needle in the median line, probably because the peritonitis, which followed some of the previous tapplings, had caused adhesions at this part. The needle was reinserted about midway between the median line and the anterior superior spine of the right ilium, when eight pints were drawn off in six hours. From

this time patient began to improve. May 23, three pints removed in five hours. May 26, patient was out of bed, the first time for six months. June 6, three pints removed in four hours. July 31, was sent to the seaside, where he remained two months, and on his return was able to walk to my house and report himself. March 10, 1881, have seen patient and find him still improving; no reaccumulation of ascitic fluid, the only complaint being of troublesome constipation.

REMARKS.—The general treatment has been the absolute withdrawal of alcohol. At first purgative doses of compound jalap-powder, with diuretic pills of mercury, squills and digitalis were tried, but they had no effect on the ascites. After paracentesis was commenced, a saline aperient of the sulphates of soda and magnesia was given every morning, and occasionally ether mixtures, to relieve the flatulent distension, which was at times distressing.

After quoting from Aiken, Bristowe, Niemeyer, Frierichs, Thierfelder, the writer continues:

We see then, that these five eminent authorities consider that paracentesis should only be performed as a *dernier ressort*. The two exceptions to which I alluded are Dr. Murchison and Dr. Roberts.

Dr. Murchison says: "The operation when delayed until the last, is often followed by rapid sinking, with typhoid symptoms. . . . The advantages of early tapping are these. First, by removal of pressure, the establishment of collateral circulation through the more healthy portions of the liver itself, as well as the veins of the abdominal parietes is promoted. Secondly: the functions of important parts, which have been impaired or arrested by the pressure, are restored. Not only are the lungs relieved; but by the removal of pressure from the portal and renal veins, assimilation and the secretion of urine are increased. Thirdly: diuretic and other remedies, which, when the abdomen is full of fluid, have produced no effect, probably from not being absorbed, will often (after paracentesis) act powerfully, and thus retard or prevent the accumulation of fluid in the peritoneum. As soon, therefore, as the abdomen becomes moderately distended with fluid, I would recommend you to lose no time in having recourse to paracentesis. Even should the fluid reaccumulate repeatedly, you need not despair."

Lastly: Dr. Roberts, when speaking of the treatment of dropsy, says: "There is one class of cases in which paracentesis may not uncommonly be performed as a curative measure, as far as the ascites is concerned—namely, when it is dependent on cirrhosis of the liver. In such cases, I have for some years had recourse to repeated paracentesis, as a systematic method of treatment, the fluid being taken away again and again, should it reaccumulate, and the results have been most satisfactory—due care being, of course, exercised in the perform-

mance of the operation, and in the subsequent management."—*Brit. Med. Jour.*, June 4.

A METHOD OF CURING HYDROCELE WITHOUT CONFINEMENT OF THE PATIENT.

Dr. T. L. Ogier, of Charleston, S. C. gives the following in the *Am. Med. Bi-Weekly*. Whatever contributes to the relief and comfort of our patients, in however small a matter, and which has not yet come under the notice of the profession, is undoubtedly our duty to make known. Without, therefore claiming credit for a new operation, I will relate the following treatment for the cure of hydrocele.

On the 20th of April, 1864, without drawing off the water of the tumor, I injected, with a hypodermic syringe, about thirty drops of strong comp. tincture of iodine, thinking that the dilution of the iodine in the fluid of the hydrocele would stimulate the sac sufficiently and that the next day the water could be drawn off and the surfaces of the vaginal sac be thus allowed to come in contact. To my surprise, the next day, the hydrocele was not half the size, the fluid had been absorbed. Instead, therefore of drawing off the water, on the 23d I repeated the iodine injection, and on the 26th, though the swelling had been still more reduced, I again threw in the iodine. On the 30th, the fluid had disappeared, though the vaginal coverings and the testicle itself were thicker and hung down lower than on the side not implicated. He wore a suspensory bag from the third day after the first injection, and I directed him to continue to wear this, making it a little tighter than he had been wearing it. From the first injection, this patient experienced no pain or inconvenience and did not lose an hour from his work.

He had no return of his disease six months after the operation; the cure was therefore complete.

Encouraged by the success of this operation I have treated successfully eleven other cases, and my friend Dr. I. S. Mitchell, at my suggestion, has treated five cases with like success. I have not tried this in very old hydroceles. I doubt if it would succeed in such. In these cases I have first evacuated the water, and then injected 3i strong tincture of iodine and left it in the sac, and applied a tight suspensory bandage; the pain and swelling have been severe, but the cures have been eventually good. If, then, this troublesome and not uncommon disease may be cured by the above simple operation, without the patient losing an hour from his ordinary business, as these cases would show, it would be an improvement in the surgical treatment of such cases to adopt this operation, instead of the old plan of tapping and injecting iodine, port wine, sulphate of zinc, etc.

AMPUTATION AT THE HIP-JOINT; NEW MEASURES TO CONTROL HEMORRHAGE.

(*Archiv für Klinische Chirurgie*, Bd. 26, Heft. 4. Berlin).

In his paper, read before the Tenth Surgical Congress, at Berlin, April 9, 1881, Prof. Trendelenburg, of Rostock, referred to the danger of hemorrhage in amputation at the hip-joint, and the difficulty of controlling it. He ascribes the unfavourable results of this operation to the copious loss of blood more than to any other cause.

Esmarch's method cannot be relied upon in this operation. However high the constriction of the member is carried, it is still too low to permit the formation of flaps. Besides, it has a tendency to slip downwards. Compression of the abdominal aorta and the iliac artery is ineffective and not to be trusted in corpulent and unruly patients.

With the view of meeting this difficulty, Prof. Volkmann has introduced a new procedure which improves the chances of recovery. He constricts the limb as high up as possible by Esmarch's bandage, amputates, ligates all vessels, and then proceeds, by an external incision of the entire stump, to remove the remaining portion of the femur from the acetabulum and its muscular connections. Irrespective of the slipping downwards of Esmarch's constrictor, in high thigh amputations, this method leaves a very extensive wound, and eventually a very bulky stump; and these are material objections.

In order to obtain the greatest protection against loss of blood and avoid the objections to Volkmann's operation, Prof. Trendelenburg has adopted the following plan: Following Lisfranc's method, he transfixes the thigh in front of the joint with an arrow-like instrument. This is thirty-eight centimeters long, six millimeters wide and two millimeters in diameter, with its transverse surface oval in shape. The lance-shaped extremity is removable. The "arrow" enters the thigh at the hip-joint, and emerges at the fold of the scrotum, where the point is removed. An elastic band (or tube), held by the "arrow" is then applied in the form of the figure eight (8) in front of the thigh. This compresses the femoral vessels. The anterior flap is then made, and the vessels secured, and the elastic tube and the "arrow" removed. The latter is then inserted behind the joint, the band again applied, and the posterior flap formed in a similar way, after which the femur is disarticulated.

The author has not only tested this method in several cases with signal success, but he has also experimented on cadavers, a continuous stream of coloured liquid being injected into the abdominal aorta, and there was no loss of liquid.—*St. Louis Clin. Record*.

VOLKMANN'S SUBTROCHANTERIC OSTETOMY.

Early in August last I saw, in consultation with Drs. Henry, Gibbons, Jr., Whitwell and Rosenstirn, also a few days later, with Drs. Kivas and Ollino, Hugo L., a boy twelve years of age, who was affected with excessive deformity of the right hip, and excessive atrophy of the leg. According to information given by the parents, the child had first shown signs of suffering when six months of age; the pain came on suddenly on the right side of the pelvis, accompanied by swelling, the thigh being flexed upon the pelvis.

In spite of the best medical skill neither the progress of the disease was arrested nor its consequences averted. A deformity followed which prevented the child from standing alone until very late, and it never was able to walk without the aid of crutches or an apparatus to compensate for the great shortening. It is useless to enumerate the many attempts made to ameliorate this unfortunate condition. In 1874 the child was taken to Paris, and treated in the establishment of Dr. Duval, of Neuilly. Since then no treatment has been followed, care being only taken to provide proper apparatus as the child grew.

Photographs show the form of apparatus lately worn. While it acted as a sufficient support between the superior and middle third of the thigh, it would have been of little use in walking had the patient not been both light and active. The disproportionate development of the other leg showed that the patient used it almost entirely. At the consultation a posterior-superior-iliac dislocation of the femur was found, and the head of the bone could be felt distinctly. There was slight mobility. The upper border of the trochanter was found two and a half inches above the Roser-Nelaton line. The thigh was flexed at an angle of forty-five degrees, in a state of strong adduction, and with a slight degree of interior rotation. In the vertical position there was lordosis of the spine in the lumbar region, and lateral curvature towards the left, and a lifting up of the corresponding half of the pelvis. All these deformities were excessive and very apparent. When standing, the distance between the heel and the ground, with the foot at right angle with the leg, was five and a half inches; with the foot extended, the distance between the end of the toe and the ground was four and a half inches. There was therefore an exaggerated atrophy of the limb. On measuring from the upper border of the trochanter to the external malleolus, there was a difference between the two limbs of one and three-eighths inches. The knees could not be fully extended, and the child was unable to touch the floor with the toes. The apparatus which he wore rested upon the posterior part of the thigh, and

terminated in a steel foot. In order that the foot might rest flat in a shoe, an operation of tenotomy of the tendon Achilles had been performed by Dr. Duval, at Neuilly.

Although there was great deformity, I suggested the Volkmann operation, considering it the best, especially in regard to the future. This operation was accepted by all the consulting surgeons, and was performed on August 8th, 1881, in the presence of Drs. Gibbons, Whitwell, Rivas and Ollino. Chloroform was given by Dr. Ollino, and Mr. Pietro Rossi took charge of the spray and Lister's antiseptic dressing.

Having thoroughly disinfected the skin about the hip joint, a longitudinal incision of two and a half inches in length, was made from the upper edge of the great trochanter, on the posterior and exterior face of the thigh, down to and through the periosteum. This was then cut across, and with the raspatorium, it was detached from the posterior and anterior part of the great trochanter; then with the chisel (as will be described), a cuneiform piece of bone was taken out, which had a base of about one square inch. This was taken from the posterior exterior portion of the femur, there being a strong flexion and only a slight adduction to correct. The division of the bone included three-fourths of its diameter; the remaining fourth was fractured without difficulty, and the leg easily straightened. The wound was washed, and closed by five stitches, after placing within it two short drainage tubes. Lister's dressing was then applied. Extension was made to the limb with a three pound weight at first, but within a week this was gradually increased to eight pounds. The pain was not severe, and ceased entirely after the first day; the temperature was but little above normal, except on the third day, when, from a stoppage in the drainage tube, it arose to 104°. The digestion was good, and the bowels regular. For the first three days the dressing was changed daily, and afterward only every two or three days; the stitches were removed on the seventh day, and both drainage tubes by the tenth. There was no local reaction, no suppuration, and the wound healed by first intention; an immovable silicate of potash bandage was applied on the thirtieth day. The result will be given in a later paper with photograph.—Dr. Devecchi, Turin.—*Western Lancet*.

TREATMENT OF CHOREA.

Dr. William Strange (*British Medical Journal*, vol. ii. 1881, p. 145,) says that the changes must be rung on the so-called nervine tonics, varying them according to the temperament of the child or to the collateral symptoms accompanying the choreic movements. If pallor, palpitations, and loss of weight exist, iron or arsenic, or both, will

be necessary. If, on the contrary, the vascular system be sufficiently full and the mobile element prevail, then the bromides with ammonia, or the succus conii, will be of most avail. Frequently, whatever the condition of the vascular system and of the general nutrition, no good arrives until we have succeeded, by sedatives, in calming the excessive mobility of the nervous system. In these cases Dr. Strange has used the ice-bag to the spine and the ether spray to the nape of the neck, but not with much success. Direct calmatives—digitalis, belladonna, cannabis indica, with the bromides—answer the best.

The nervous symptoms once quieted, iron or arsenic may now be given, and carried to a somewhat higher degree. Some have recommended large doses of arsenic, ten to fifteen minims of Fowler's solution; but Dr. Strange has seldom found that the stomach will tolerate these large doses, and has contented himself with much smaller ones, in combination with iron or zinc.

But, whatever the remedy selected, it will be necessary to continue its administration until it has produced its special physiological effect. Especially is this necessary with the neurotic sedatives. Children bear large doses of belladonna and conium; and Dr. Strange has never found this class of remedies do much good until their full physiological effects (consistent with safety, have been produced.

Dr. Strange used some years ago to treat all his cases of chorea with wine alone, the port wine of the hospital, merely clearing out the primæ viæ, to make sure that trouble was not caused by entozoa or depraved alvine secretions. The amount given was three to six ounces daily, and all the cases got well. After suspending this treatment for some years, he has recently recommended it with good results.

HEPATOMY FOR HYDATIDS.

BY LAWSON TAIT, F.R.C.S.

The sixth case of this operation, which I have performed, like the others, has been remarkable for the speedy and complete recovery of the patient.

A. M. S., æt. 7, early in May last, suffering from severe symptoms due to a tumor on the right side, and above the level of the umbilicus, which was clearly cystic, and, in all probability, connected with the liver. It gave great pain, and I diagnosed it to be a hydatid tumor of the liver. The child had always been regarded as delicate. A year ago, her mother noticed that her motions were rather white-coloured. Swelling was noticed in abdomen about November last, and she complained of pain across the back and shoulders. December, 1880, there was a firm tumor just below the ensiform

cartilage, the dulness extending round the side. In February, there were some nodules on the surface of the liver; also tumor was more freely movable.

When admitted, had a tumor about the size of a foetal head, which was extremely tender to the touch. The child was very sick, and appearance warranted interference. Opened the abdomen May 20, making an incision about three inches long, one inch and a half to the left of the umbilicus, the lower end corresponding to the umbilical level. When the cavity was opened, it was perfectly clear that the tumor was situated in the liver, and was a hydatid cyst. Removed from it, by means of an aspirator, about twenty-six ounces of clear fluid, containing a large number of scolices. Then enlarged the aperture in the liver to about one inch and a half, and secured its edges to the edges of the parietal wound by means of a continuous suture, and fastened in a wide, soft, India-rubber drainage tube about six inches long. She went on perfectly well; severe symptoms immediately relieved, and May 26 the mother-cyst came away entire. Drainage-tube removed May 30; and June 2 she left with the wound quite healed, having gained greatly in weight, and having acquired a perfectly healthy appearance. No attempt was made to conduct the case upon Listerian principles, the only dressings used to the wound being red lotion and absorbent wool.—*British Med. Journal*.

TREATMENT OF COMPOUND FRACTURES AND WOUNDS OF JOINTS BY GLYCERINE AND CARBOLIC ACID.

I have thought an account of a few cases that I have treated with the *glycerinum acidi carbolici* of the British Pharm. without antiseptic spray or any very elaborate precautions, would be of general interest. And although the number of cases is not large, still the fact that they have all got well has produced a strong impression on my mind of the value of this mode of treatment.

A pipe manufacturer of intemperate habits, who had taken to fishing, was engaged in hauling in a net, when he got his leg caught, was thrown down, and found himself unable to rise. I found he had sustained a compound fracture of the tibia, at the junction of the lower and middle thirds, and had lost a large quantity of blood from a small wound caused by the upper fragment of the tibia having been driven through the skin. Bound it up temporarily, to arrest bleeding. After about twelve hours, when bleeding had quite stopped, the temporary dressing was removed, and a pad of lint soaked in collodion applied. This pad remained on two days, when it became partly detached, and free oozing of bloody fluid commenced from the wound. Now applied a pad of four thicknesses

of lint saturated with *glycerinum acidi carbolici* to the wound, and a few turns of bandage over it, so as to keep it in proper position. The lint became firmly adherent to the wound, and the next day I applied a large pad of four thicknesses of lint soaked in the same way over the original pad, so as to keep it still saturated. On the third day afterwards I cut the edges of the two outer layers of the pad, next the wound, and removed and soaked them with *glycerinum acidi carbolici*, and then reapplied them, and then the bandage as before. I regard it of much importance not to disturb the layers of lint immediately covering and generally attached to the wound. After treatment had been continued about ten days, a large blister containing dark fluid formed under the pads and showed at their edges. I cautiously tried whether the under pad was still adherent, and finding it was not, I removed it and found that the wound had healed. Left the blister exposed to the air, and it dried up in a few days. The remaining progress of the case in no way differed from that of one of simple fracture, and the man ultimately completely recovered.

The next patient treated in this way was a boy about ten, with compound fracture of the tibia, the upper fragment of the bone having been driven through the skin. The *glycerinum acidi carbolici* was applied on four thicknesses of lint about two hours after the accident, and covered with cotton-wool, and fresh glycerine and acid was applied to the lint daily, without disturbing the layers next the wound. After about ten days the lint was removed, and the wound found to have healed. A speedy recovery followed. The fracture apparatus used was of the same kind as in the following case.

The next jumped out of a cart while his horse was running away. He sustained a simple fracture of the fibula and compound dislocation of the foot outwards, the lower extremity of the tibia being driven through the skin, the sock, and the elastic of his boot against the ground, and the internal malleolus broken off. When he had been conveyed home the bone was still protruding, and the foot could not be got at until his boot and sock had been cut away. The bone being covered with dirt from the road, was now carefully cleansed, and an attempt to reduce the dislocation was made. We did not, however, succeed in effecting the reduction until a slice of bone had been sawed off the projecting end of the tibia. After the reduction the limb was placed on an iron back splint, with two wooden side splints duly padded and suspended from a cradle, the apparatus being of the kind used at St. Bartholomew's Hospital. About three hours after I syringed out the ankle-joint with a solution of carbolic acid in 39 parts of recently boiled water, and then, after cleaning round the wound, applied a pad of lint of six or

eight thicknesses, saturated with glycerinum acidi carbolic, taking care that the upper layers were of sufficient size to project some little way beyond the wound, so as to exclude air effectually, in case of the patient becoming restless. This was then secured by a bandage. The next day all the upper layers of lint were removed, soaked as before, and then reapplied, except the three next the wound, which were left undisturbed. Then over the lint I put a large piece of carbolic acid plaster, and secured it with a bandage. This mode of dressing was repeated night and morning for several weeks, during the whole of which time not more than about a tablespoonful of discharge escaped from beneath the pad of lint. This discharge was of a pink color, opaque, and nearly solid. The bowels were confined, and pain and starting relieved with tincture of opium, for about a fortnight. After this the patient, who ate heartily his ordinary diet the whole time, used to sit up in bed and write letters, and keep accounts. After six weeks I gradually reduced the amount of carbolic acid by adding more glycerine, and when the wound was nearly healed used spermaceti ointment. He ultimately made a good recovery, and can walk considerable distances with the aid of two sticks.

The patient was a cabdriver, æt. 50. His horse fell down as he was driving, and while endeavoring to hold him up, he was pulled off his seat and broke his leg. I found a lacerated wound about three inches long, through which the end of the upper half of the tibia was protruding. After the fracture had been set, and the edges of the wound drawn together, except over the seat of fracture, where, in consequence of the swelling of the leg, the skin would not meet without more force being used than appeared desirable, a pad of lint of about four thicknesses was saturated with carbolic acid and glycerine, and lightly bandaged on. The fracture apparatus used consisted of an iron back-splint, with two wooden side-plints, padded and suspended from a cradle, as in the previous case. Over the pad a piece of carbolic acid plaster was placed. The next day a fresh pad of about four thicknesses was soaked as before mentioned, and applied over the previous one, and the plaster over them both. This dressing was repeated night and morning for about a fortnight, after which it was reduced to once a day. The man was on ordinary diet throughout, and there was no constitutional disturbance. About a month after the accident the lint next the wound was for the first time removed, and the wound found to have healed except over the end of the bone, where there was a wound about an inch long, with bare bone exposed. The special treatment was now discontinued and poultices were used. A little later a thin layer of bone came away, and the wound then soon healed, and the man recovered with a useful leg.

The next was a brewer's drayman, a large made

and very fat man, accustomed to the free use of the beverage he supplied. His horses started off while he was in a public house, and when he ran to their heads he was knocked down, and the front wheel of the dray going over the inner side of his knee, turned back a large flap of skin, and made a lacerated wound that extended into the knee-joint. A surgeon was called, who dressed the wound, put in some stitches at suitable points. When I saw him a large pad of four thicknesses of lint, saturated with glycerinum acidi carbolic, was applied over the wound, and kept saturated by fresh supplies on its outer surface renewed daily. For a week or ten days all went well, and no trouble connected with the joint occurred afterwards, but at the end of that time the lint came off and poultices were used instead, the edges of the skin flap being found to be sloughing, and erysipelas of the leg commencing. The erysipelas followed a severe course, as it did also in several other cases that occurred about the same time, but in the end he recovered and returned to his occupation as drayman.

The next fell from a scaffold 18 feet high, sustaining a severe compound fracture of the lower jaw, while another man falling upon him broke his thigh, and the bone coming through the skin, wounded the internal saphenous vein and caused such copious bleeding that the man appeared in danger of immediate death from loss of blood. A large sponge was bound tightly over the wound, and the bleeding thus arrested. The fracture was then set, a long splint and bandages being used in the ordinary way. The treatment having reached this stage when I first saw the man, who was cold, perspiring profusely, with livid face, and evidently almost dying from loss of blood, I applied the glycerinum acidi carbolic freely to the bandages over the sponge, and then lightly bound over them four thicknesses of lint saturated with it. The next day I removed the lint, cut slits at short intervals in the bandages, and injected the glycerine through them with a syringe and along the upper edge of the sponge, and then reapplied the pad of lint freshly saturated as before. This treatment was continued for a fortnight without disturbing the sponge, after which the wound was found to have healed. The man's health improved throughout, and he recovered in about the same time as if it had been a simple fracture of the thigh.—Dr. Griffin, in *London Lancet*, Sept.

LACERATION OF THE CERVIX UTERI.—In the *New York Medical Journal and Obstetrical Review* for September, 1881, Dr. Charles Carroll Lee, Surgeon to the New York State Woman's Hospital, indicates the proper limitations of Emmet's operation for laceration of the cervix uteri. Little heed, he remarks, was paid at first to Dr.

Emmet's suggestion of the pathological importance of lacerations of the cervix and of the desirability of treating them by operation in certain classes of cases; but, after Dr. Emmet had, on a subsequent occasion, more fully demonstrated his views, it soon came to pass that the operation of trachelorrhaphy was performed in the most trifling cases, and advised in conditions entirely unsuitable for it. Hence an unjust obloquy was thrown upon it, and in many European countries, England in particular, it is still regarded with disfavour. One of the immediate results that occasionally follow cervical laceration is *post-partum* hæmorrhage, and the author thinks it may fairly be questioned if the puzzling cases in which hæmorrhage goes on, in spite of firm uterine contraction, are not always of this nature. He gives full credit to Dr. Pallen for his observation and teaching in regard to this aspect of the matter, and then passes to a consideration of the conditions that demand the performance of the remote operation, together with those that contra-indicate it. In many cases of notable rents of the cervix there is no indication for operative interference. The obvious or ascertained pathological influence of the laceration—not its extent or size—should be our guide for its treatment. If it presents a cicatrized surface, and if there is no hyperplasia or inflammatory condition of either the neck or the body of the uterus, a surgical operation would be absurd, even though the rent were bilateral and had divided the cervix up to the vaginal insertion. If, on the contrary, the laceration is unilateral only, and comparatively small in area, but with a raw, unhealed surface, and associated with either cervical or corporeal metritis, it is absolutely certain that the inflammation will never get well until the laceration is cured, although the symptoms may be overcome for the time being. Still more pointedly may this be said of extreme cases of bilateral laceration with extensive eversion of the cervical canal, with or without cystic degeneration. A much more limited class of cases is that in which the laceration was healed, leaving the cervix tough and nodular, and the angles of the rent filled with cicatricial tissue, in which nerve filaments are often caught and compressed, causing excessive reflex irritation of the uterus and of the general nervous system. The test of such a case is the sudden pain, like a tooth-ache, which pressure with the finger in the angle of the tear generally gives. In such cases the operation is speedier and more thorough than other measures in destroying the "cicatricial plug," never having failed, in the author's experience, to yield a most satisfactory result. While thus warmly urging trachelorrhaphy in proper cases, Dr. Lee defines no less positively the conditions that forbid its performance. Parametritis is undoubtedly a bar to the operation; and yet, he adds, how often are we asked to oper-

ate or to sanction an operation while the pelvis is still half filled with an inflammatory deposit of lymph! Of the importance of pelvic peritonitis less need be said, partly because opinions differ as to whether this condition can be separated from parametritis, and partly because the objection raised in the former inflammation would lie equally in this case. As inflammatory fixation of the uterus is, however, peculiarly characteristic of pelvic peritonitis, its existence in any form should be deemed an insuperable barrier to the operation. Endometritis and acute trachelitis also contra-indicate it, as well as all conditions of extreme impairment of the general health, except such as may reasonably be presumed to depend upon the laceration itself, or upon the uterine disturbance that is kept up by it.

ANECDOTES OF SKODA.—The *Staatszeitung* quotes several anecdotes about Skoda, some of which are a good index to his character. One day he was invited to dine at Court. After having delivered his lectures and attended to his patients, he repaired thither in his customary well-worn, old-fashioned apparel. "But the Herr Professor might have appeared with a frock-coat," reproachfully intimated the official charged with the reception of the guests. "Well then," said Skoda, "I'll ride home and send my frock-coat here to dine." Upon another occasion, by Ministerial decree, certain changes were to be made in the hospital, the utility of which Skoda denied, in spite of the Burgomaster's opinion to the contrary. "Your Excellency," he said bluntly, "we physicians are the best judges of such things." The angry retort that the government was paying the money and intended exclusively to control it, was met by the argument that the funds belonged no more to the government than to the medical authorities, but that they were the property of the tax-paying multitude, who looked to the opinion of competent persons as to the disposal of them. Skoda, ever since his student days, was in the habit of attiring himself in exceedingly antiquated style. Decades passed by, but the cut of his "inexpressibles" remained the same, in spite of the bantering remarks of his friends. One day, however, to the great surprise and amusement of everyone, the great clinician appeared in an elegant pair of pantaloons, of faultless style. "As a student," he explained, "I lived with a tailor, who rendered me a good many services, and greatly assisted me, so I always remained his customer. The poor man is dead now, and I—have to wear fashionable pantaloons." For a pain in the foot, Skoda employed a salve prescribed by a colleague. Questioned as to the result of the treatment, he remarked: "Where I applied your salve, the pain was arrested; but where I did not, it ceased much sooner."

MARTIN'S RUBBER BANDAGE IN ULCERS.—A patient applied to me July 20 for treatment for a large varicose ulcer on the internal aspect of the right leg. On my proposing to apply a Martin's bandage, he demurred, on the ground that he had tried one formerly—that, owing to the confinement of the perspiration, his leg was in a constant water-bath, and the heat, itching, and pain were unendurable. I had before felt the force of this objection, and have no doubt but that this has been the greatest obstacle to the successful employment of this bandage in a large class of cases. It occurred to me that the desideratum—ventilation—might be attained by perforating the bandage without sacrificing in other respects its usefulness. In pursuance of this plan, I procured an ordinary shoe-punch and riddled the bandage with holes—about nine to the square inch. By punching three or four thicknesses at once, the labour was considerably facilitated. This bandage was applied with entire success. Ventilation is perfect. The leg feels cool, dry and comfortable, and at this date the ulcer has almost entirely healed.—Dr. Lewis in *Med. Times*, Phila.

OCULAR SYMPTOMS IN DIFFERENT DISEASES.—Dr. Gorecki has tabulated his views as follows :

Blepharoptosis, or the falling of the upper eyelid, indicates paralysis, complete or incomplete, of the third pair.

Lagophthalmos, or inability to close completely the palpebral fissure, is a sign of facial hemiplegia, idiopathic or a symptom of cerebral disease.

Strabismus occurring suddenly and accompanied by diplopia is most frequently the result of some cerebral affection.

Xanthelasma (a yellow lamina sometimes met with in the skin) of the eyelids occurs in certain alterations of the liver.

Subconjunctival ecchymoses are frequent in whooping-cough, and may sometimes, at the beginning of the complaint, clear up a difficult diagnosis.

Redness of the conjunctiva, watering of the eye, etc., indicate in the child the outbreak of some eruptive fever, particularly measles. The prognosis is favorable if the tears come when the child cries, but fatal if the secretion of the tears is arrested.

Spots on the cornea are often the indication of a strumous constitution.

Dilatation of the pupil, or mydriasis, indicates excessive fatigue, the existence of intestinal worms, meningitis in the second stage, or a true amaurosis. The dilatation is most frequently connected with atrophy of the optic nerve. It is seen also during an attack of epilepsy, on coming out of chloroform, after belladonna-poisoning, etc.

Unequal dilatation of the two pupils points to the onset of general progressive paralysis.

Contraction of the pupil is one of the early symp-

oms of *tabes dorsalis*. It is met with also at the beginning of meningitis, in opium-poisoning, and in the first stage of chloral-poisoning.

Deformation of the pupil, particularly after the injection of atropin, indicates an old iritis, in nine cases out of ten, of syphilitic origin, if not depending on some disease of the neighboring parts.

Cataract in subjects under say forty or fifty is frequently of diabetic origin, and constitutes soft cataract.

Finally, the ophthalmoscope enables us to recognize the retinitis of albuminuria in Bright's disease, of simple polyuria, and sometimes in the case of women during pregnancy. Retinal hemorrhages, œdema of the retina, and embolism of its central artery are sometimes met with in organic affections of the heart. Optic neuritis and perineuritis, and atrophy of the disk, are symptoms of syphilis, or of tumors in the neighborhood of the cerebellum or the corpora quadrigemina.—*Gazette des Hôpitaux*; *Glasgow Medical Journal*.

CONSULTATIONS WITH HOMŒOPATHS.—The following extract is from an editorial in the *Medical Times* of Philadelphia, Oct. 8, '81: Upon the other side of the Atlantic the subject of the relations between "homœopaths" and "regulars" in the profession is attracting renewed attention, and some disposition seems to exist towards breaking down the barriers which have so long stood hard and firm between the two camps. Both homœopathy and allopathy are most dangerous errors. These things being so, why cannot the "regular" meet the "homœopath" in consultation? The "regular" can and will meet the "homœopath" just so soon as the latter is ready honestly and fairly to meet the "regular." The scientific physician says, "I believe in no therapeutic dogma; I desire to get all out of science that I can to help me in the cure of diseases. But I recognize that science is yet very imperfect; and from Choctaw or Hottentot, from old woman or young maiden, from homœopath or allopath, from king or peasant, from savant or quack, I will eagerly seize aught which shall aid me in the battle for life." The moment that the "homœopath" takes this ground, that moment he is side by side with the "regular." It is no longer homœopathy or allopathy, but common-sense doctoring. But until the homœopath does this it is impossible for the two physicians to work together. If the homœopath is honest, the regular is yoking himself with one who is maimed and crippled by an adhesion to an old and exploded fallacy; and Paul says most truly, "be not unequally yoked."

If the homœopath is willing to sink his homœopathy, and, in fact, habitually practises something else than homœopathy, no honest man can meet him in consultation without smearing his own self-respect. To gain practice by taking advantage of popular ignorance and prejudice, and to ride into

wealth upon a lie, is what no upright man can do; and to associate with a man that does this is dishonor.

This, it seems to us, is the whole matter in a nutshell. The general medical profession recognize that neither the doctrine of similars nor that of dissimilars is correct; and the moment any man comes to this conclusion, and honestly acts thereby, he is part of the regular profession, a peer of any. Until then he must occupy the position he now does.

PUERPERAL CONVULSIONS.—Several cases in which pilocarpin, by mouth and hypodermically, was used in eclampsia, are reported with varying results. Langer asserts that it excites uterine contractions and renders them more powerful, and, in two or three cases, as many physicians report a similar result; but Kroner used (*Am. Four. Obstet.*) injections of pilocarpin in four cases without any appreciable effect upon the uterus, although the toxic effect of the drug was marked.

The weight of opinion seems to favor chloral in large doses by the rectum. Guyot (France) reports remarkable success, thirteen or fourteen cases being saved. He injected into the rectum from one to four drachms in twenty-four hours. Dr. Goodell believes it the best single remedy. He directs a drachm by rectum, or twenty grains by mouth, repeated as often as may be necessary, and asserts that he has never lost a case. Other writers are equally laudatory of chloral, while none discard chloroform. With regard to the induction of premature labor in eclampsia, there seems to be a growing sentiment in its favor, and successful cases are recorded.

Blood-letting is apparently growing in favor again. Many writers advocate it, or at least speak of it as a too much neglected remedy. Dr. C. C. P. Clark (*Am. Four. Obstet.*) is a strong advocate for the use of morphia in heroic doses. He argues that a woman who bears her pregnancy lightly never has convulsions, hence a prophylaxis consists in removing all irritating conditions. In eclampsia the nervous system is peculiarly tolerant of opiates. Ordinary doses are useless. Inject at once into the arm *a grain and a half of morphia*; should the paroxysms return any time after two hours, repeat the dose. If in labor, repeat the dose in eight hours, anyway. He says: "This quantity may look large, but I am perfectly confident, after having tried it many times, that it is absolutely safe. I am almost prepared to swear that twice the quantity, not repeated, would do no harm to a patient in a strongly eclamptic condition."—*H. Gibbons, Jr., in Pacific Med. Four.*

INTRA-SPLENIC INJECTIONS OF FOWLER'S SOLUTION IN HYPERTROPHY OF THE SPLEEN.—Prof. Mosler, of Greifswald, has treated a chronic en-

largement of the spleen by means of parenchymatous injections of carbolized water and Fowler's solution. The action of the contractile elements of this organ is first to be stimulated by the application of means designed to affect them directly; then, for several hours previous to making the injections of Fowler's solution, poultices of ice are to be applied over the splenic region. In Mosler's opinion, parenchymatous injections produce much more marked effects than the internal use of the same remedies.

Certain precautions must be taken. 1. If the splenic tumor is a hard one, it makes no difference whether or not the hemorrhagic diathesis or extreme anæmia coexists. 2. The preliminary precautions above mentioned should be taken. 3. Fowler's solution is the best medicine to use. Mosler reports several cases, in one of which benefit was obtained after half a syringe and then a whole syringe of Fowler's solution had been injected!—*Allg. Med. Cent. Zeit.—Med. Times, Phila.*

PIGEONS AS MESSENGERS FOR PHYSICIANS.—A physician of Erie, Pennsylvania, is training homing pigeons for use in his practice. Some of his young birds put upon the road to make records for distance have made very good time, viz., 50 miles in 90 minutes, 66 miles in 82 minutes. Homing pigeons are largely used by country physicians both here and abroad. One doctor in Hamilton County, N.Y., uses them constantly in his practice, extending almost over two townships, and considered them an almost invaluable aid. After visiting a patient he sends the necessary prescription to his dispensary by a pigeon; also any other advice or instruction the case or situation may demand. He frequently also leaves pigeons at places from which he wishes reports of progress to be dispatched at specified times or at certain crises. He says he is enabled to attend to a third more business at least through the time saved to him through the use of pigeons. In critical cases he is able to keep posted by hourly bulletins from the bedside between daylight and nightfall, and he can recall case after case where lives have been saved which must have been lost if he had been obliged to depend upon ordinary means of conveying information.

INFANTILE DIARRHŒA.—In infantile diarrhœa due to indigestion and attended by acidity, the following combination is very efficacious:—

R. Pulv. ipecacuanhæ.....gr. ss.
Pulv. rhei.....gr. ij.
Sodæ bicarb.....gr. xii. M.

Div. in chart no. xii et sig.—One powder every four to six hours to an infant one year old.—*Dr. J. Lewis Smith.*

HYDROBROMATE OF IRON IN CHOREA.—A correspondent in the London *Lancet* gives the following case:—An anæmic, badly-nourished girl, æt. 14, was frightened by a dog, and almost immediately afterward developed choreiform movements. At the time of my visit, two days after the onset, the child's contortions were painful to witness; her sleep was disturbed, and it was with difficulty she could convey her food to her mouth. The heart sounds were normal, and there was no history of previous cardiac or rheumatic affections. After attending to her digestive organs, I prescribed syrup of hydrobromate of iron in 20 minim doses. The effect was very marked. The sedative action was speedily apparent, as the convulsive movements became gradually less severe, and the control of the muscles more readily recovered; whilst at the same time the anæmia was yielding to the accompanying iron. The continued use of the drug for about 20 days completely removed the affection.

IODOFORM IN THE VULVITIS OF CHILDREN.—Prof. Parrot applies iodoform by means of a badger's-hair pencil at whatever stage the aphthæ may be in, covering the parts affected with a thick layer of iodoform without previous cleaning, and then applying a little charpie. This dressing is repeated every 24 hours, until amendment takes place, which it usually does very rapidly. Even after the first application it is rare not to find a considerable improvement. The ulcerated parts look as clean as if they had been carefully washed. Their borders sink and their cavities fill up, and when they are not very extensive they are not easily distinguished from the surrounding parts. The changes take place rapidly, and lead to the speedy disappearance of vulvar or perineal breaches of surface.—*Med. and Surg. Reporter.*

PLAGIARISM IN MEDICAL LITERATURE.—The *Mea. Press and Circular* quotes the following as coming from an American surgeon present at the London International Medical Congress: "Few of us pretend to write anything original; we either haven't the time or we haven't the mind. You Europeans leave us nothing to do, and so instead of pretending to take you down a stripe, we take a book that we guess will suit our purpose, make a few foot-notes, and stick another name on the title-page. The book is none the worse for it, and its new author is helped like a lame dog over a tall stile."

LINES ON JENNER.—

"Within this tomb hath found a resting-place
The great physician of the human race,
Immortal Jenner! whose gigantic mind
Brought life and health to more than half mankind.
Let rescued infancy his worth proclaim,
And lisp out blessings on his honoured name;
And radiant beauty drop one grateful tear,
For beauty's truest friend lies buried here."

PAINS IN THE FEET.—In a paper read at the Boston Society of Medical Improvement (Boston *Journal*), Dr. Curtis enumerated the various affections in which *pododynia* or *podalgia*, or painful affection of the feet, may exist independently of all signs of disease of the part itself. These are:

1. *Urethral stricture*, as observed by Luxmoor, Brodie, and many others.

2. *Vesical calculus*. Pitha relates a remarkable case of a patient who was enabled, by the diminution of a sense of burning of the sole of the foot, to indicate precisely the progress of the diminution of the calculus by means of lithotripsy.

3. *Cysto-prostatitis*, or inflammation of the neck of the bladder, in a case met with by Dr. Curtis, the pain in the neck of the bladder was accompanied in corresponding degree with pain in the feet of a similar character.

4. *Cystalgia*, or neuralgia of the neck of the bladder. Pitha is, himself, a well-marked example of the co-existence of the two affections.

5. *Gout*. Under this head, the observations of Paget, Duckworth, and Wier Mitchell, are referred to.

6. *Renal calculus* occasionally gives rise to pain irradiated to the heel.

7. Fournier and others describe this pain as occasionally met with in *syphilis* and gonorrhœa.

8. In *locomotor ataxy* the heel may be the first, or, for a while, the principal seat of the lancinating, or boring pains, characteristic of the first stages.

9. Prof. Gross describes an obscure form of pain in the feet, under the name *pododynia*, which is met with in certain sedentary classes of artisans, especially tailors.—*Med. and Surg. Reporter.*

NITRE-PAPER IN ASTHMA.—Dr. Murrell (*British Medical Journal*, June, 1881,) bears testimony to the great value of the fumes of nitre-paper, if properly prepared, in many cases of asthma. Pieces of white blotting-paper, six inches square, are saturated in a hot concentrated solution of chlorate and nitrate of potassium. Six of these pieces are laid one over the other, so as to form a thick tablet. Before quite dry, the pieces of paper may be individually sprinkled with Friar's balsam, camphor or some other aromatic. When used, the tablet is to be folded like a book-cover, and placed on its edges on a plate, and then lighted.

PRIMARY CANCER OF THE PANCREAS.—Dr. Kennig reports, in the Petersburg Medical Woch., February 2, a minute history of a case of this rare affection occurring in a woman aged fifty-three.—*Med. News and Abstract.*

The death of Dr. J. G. Holland is announced in our exchanges.

THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science
Criticism and News.**

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, NOVEMBER 1, 1881.

This Journal has the largest circulation of any Medical Journal in Canada.

OPENING OF THE MEDICAL COLLEGES.

The Canadian Medical Schools began their labors for the session, 1881-82, on the first of last month, with an unusually large attendance in all as compared with former years. Upwards of 130 freshmen have entered the two Medical Schools in Toronto, and of these, Trinity Medical College has the lion's share. In some of the schools the work of the session is commenced by a special introductory lecture, on some subject of general interest. This practice is observed, especially in McGill College, Montreal, and in Trinity Medical College, Toronto. In the former the opening lecture of the session was delivered by Dr. Buller, Prof. of Ophthalmology and Otology. The lecture was of a practical character, and as was to have been expected, he dwelt at considerable length upon the advantage to the general practitioner of a fair knowledge of the essential principles of diseases of the eye and ear. The remarks were timely, as it is a deplorable fact that too little attention is paid by the general student to the study of diseases of these delicate and important organs, and we hope the learned gentleman will be able to excite in the minds of his own students, and medical students generally, a little more interest in the subject which he has the honor to teach in McGill College. In Trinity Medical College the introductory lecture was delivered by Prof. Fulton, in the large theatre of the school, which was filled to overflowing. His lecture consisted of advice to young men commencing the study of medicine, and also a reference to the principles which should

guide those who aspire to become members of the medical profession. He inculcated constant steady work, and diligent care and attention to the minutest details. The times in which we live, he said, demanded an ever-increasing effort to keep pace with the rapid strides of medical science. Never before in the world's history was competition in every calling so fierce as now, never did success in more than a moderate degree demand for its attainment, such a union of physical and intellectual qualities as in the present day. He also pointed out the dangers of attempting too much, of striving to excel in all arts, and advised them to concentrate their energies while at college almost wholly upon medical literature and in attendance upon lectures. In view of the nature of their calling, he counselled early cultivation of the faculty of self-reliance, pointing out to them that they would not always have their books and their teachers by their side, and he who would exercise self-reliance under great responsibility and in trying circumstances must begin early to practice it. He also encouraged punctuality, and the desirability of economizing time, and pointed out what had been accomplished by many great men who never allowed their moments to fall idly to the ground. He then drew a word picture of the student who is continually procrastinating his work from day to day, and from session to session, until disaster overtakes him in his final examination. He also impressed upon them the value of careful observation, and especially clinical observation and close attention to hospital work. He also counselled them to cultivate independence of thought and the exercise of reason and not to become blind followers of this or that authority—but to exercise their reason as well as their memory. In regard to the subjects of study embraced in their course, he alluded especially to the importance of anatomy, the key stone to medical science, and also to that closely allied branch, physiology. The subject of therapeutics—that science whose application to disease, is the ultimate aim of our art—was also brought prominently before the attention of the young student. He then addressed himself more especially to those who were spending their last session in the college, and who will soon be taking their places alongside those who are actively engaged in practice. Among the most important faculties, he said, which a young man commencing

practice can possess are, tact—practical talent—and a good knowledge of human nature; to these may be added decision, presence of mind in all emergencies, perseverance and a happy manner. Upon each of these qualities he dwelt briefly, pointing out by precept and example, what might be accomplished by their cultivation, and what the result of their neglect. He also pointed out that medicine was not a money making profession, although some few successful men acquired, late in life, a sufficient pecuniary recompense for their labours; while on the other hand they would occasionally receive rebuffs and insults for their kind offices from ungrateful patients. He then proceeded to define the difference between legitimate medicine and quackery, by saying that one deals in truth and honesty, the other in fraud and deceit. The honest scientist bears no relation to the designing, ignorant pretender. But as it is sometimes difficult to say in natural history whether a given specimen belongs to the animal or vegetable kingdom, so here in like manner, it is sometimes equally difficult to say to which class the individual belongs. There are many in each army near enough to shake hands, and there are not a few in the regular army who would be more at home under the rebel flag. He alluded to the high compliments paid to the medical profession by Gladstone and other eminent men from time to time, and concluded his remarks with the following extracts from the beautiful peroration in the address delivered by Sir James Paget at the recent Medical Congress.

“Let us always remind ourselves of the nobility of our calling. I dare to claim for it, that among all the sciences, ours, in the pursuit and use of truth, offers the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility and charity. These three, which are sometimes in so lamentable disunion, as in the attractions of novelty without either utility or charity, are in our researches so combined that, unless by force or wilful wrong, they can hardly be put asunder. And each of them is admirable in its kind. For in every search for truth we not only exercise curiosity and have the delight—the really elemental happiness—of watching the unveiling of a mystery, but on the way to truth, if we look well round us, we

shall see that we are passing among wonders more than the eye or mind can fully apprehend. And as one of the perfections of nature is, that in all her works, wonder is harmonized with utility, so is it with our science. In every truth attained there is utility either at hand or among the certainties of the future. And as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth, utility, so in every use of it there may be charity. I do not mean only the charity which is in hospitals or in the service of the poor (great as is the privilege of our calling in that we may be its chief ministers) but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion.

“Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us as a vow of brotherhood; and may God help us in our work.”

TRADE MARK LITIGATION.

An interesting suit is now pending in the United States' law courts in relation to the use of the trade mark “Tonga.” This drug first attracted the attention of Drs. Sidney Ringer and William Murrell, of London, as a reputed Fiji island remedy for neuralgia. It was investigated by them and the results of their investigations published for the benefit of science in the London *Lancet*. The statements in regard to the efficacy of the remedy in neuralgia, published by these investigators, created more or less interest in the drug, and a demand sprung up for the article both in England and America. This induced Messrs. Parke, Davis & Co., of Detroit, to send a special agent to the Fiji islands, to procure a supply of the genuine article to meet the demand. This they placed in the hands of the profession throughout the country, donated samples to hospitals and public institutions for trial, and also offered it for sale in the ordinary course of business. At this stage of the proceedings, Messrs. Allen & Hanbury, an English house, came forward and instituted legal proceedings against Parke, Davis & Co., for what they allege is an infringement of their trade mark. It seems that the English firm above-named has registered the name “Tonga,” in Great Britain and the United States, as a trade mark on the

drug tonga and seek to gain an unlimited monopoly of the manufacture and sale of the article by this means. The case is attracting considerable interest among the drug trade in the United States, as it involves a principle which has frequently been passed upon by the ordinary courts, but apparently has never been definitely and specifically settled by the Supreme Court; that is, whether a party has the right to trademark the proper name of an article and thus exclude others from the manufacture of the same article, and the name having by adoption and use become the name of the article, whether others have the right to manufacture and sell the same article under the same name, the article not having been patented. This will affect many of the pharmaceutical preparations for which protection is sought by registering the names as a trade mark. The defendants regard the principle involved in the case as of vital importance to the drug trade and have determined to test it in the highest judicial court in the United States.

There is another matter closely allied to this one, which calls for a passing remark, that is, the practice of some pharmaceutical chemists in recommending their preparations for general use by the public. There can be no doubt that the medical profession is greatly indebted to the pharmaceutical chemists for the introduction of many elegant and useful preparations, and they deserve to profit by their labors and ingenuity, but it is surely not in the interest of either the profession or the public that pharmacists should prescribe them for the public, and thus usurp the place of the regular physician. This, we regret to see, is being done in the daily press by several pharmaceutical chemists, whose preparations bear the imprint of a trade mark. We would warn those pharmaceutical chemists who appeal to the general public to purchase their wares, that the profession will be compelled, in defence of its own privileged rights, and for the good of the community, to abstain from countenancing in any way the preparations so advertised, or prescribing them to their patients. It is not necessary that we should say anything regarding the great injury that is done to the public, by the indiscriminate use of patent or proprietary medicines and pharmaceutical preparations and drugs of all sorts, without the advice and direction of an intelligent physician.

THE GROWTH OF EMPIRICISM.

Within the past few years quackery has made progress to an alarming extent, both at home and abroad. Not only has the sale of patent medicines largely increased, but other types of empiricism of a more serious nature have cropped up, which too often have in connection with them, the names of qualified physicians. We can scarcely pick up a newspaper, religious or secular, which does not contain an advertisement of some secret formula which claims to be a specific for some disease, and to make it appear more plausible, it is usually over the name of the Rev. somebody or the distinguished Dr. some one else. These charlatans claim to have made great discoveries in foreign countries, in which they have found a certain remedy for consumption, rheumatism, liver complaint, cancer, impotency, spermatorrhœa, or some other disease. They send circulars and pamphlets through the mails, in which they frequently describe minutely, certain physiological phenomena, as diseased conditions, and the unsuspecting reader is led to believe that his destruction is inevitable, unless these symptoms are relieved, and as a matter of course, their remedy is necessary to perform the cure. Every physician knows how detrimental to the public welfare such devices are, and how easily the public are duped by the wiles of these charlatans, hence it becomes the duty of every practitioner, as a benefactor of humanity, to endeavor to suppress such practices in every possible manner. No doubt it would be difficult to stop these impositions entirely, but a great deal might be done towards it, if the profession would adopt some definite course, and persist in endeavoring to correct the evil.

We have at least one newspaper in Canada in which a column each week is devoted to prescriptions and advice to the sick. A few weeks ago, a correspondent of this paper complained of a pain under the shoulder-blade, and through the chest. He had "applied mustard plasters without relief." For answer he was assured his disease was neuralgia, and was advised to use hypodermic injections of morphia.

Comment is wholly unnecessary, but we might remark that perhaps the editor has educated his patrons in the use of the hypodermic syringe, and has also concluded on his own account that the

indiscriminate use of morphia can do no harm if it does not benefit.

It is high time the public was taught that there is no secret in the mere prescription which a physician gives, and that he cannot prescribe intelligently without seeing the patient; and also, that patent nostrums are not suitable for the cure of disease. A physician will experience little difficulty in convincing those of average intelligence, that the human system is too delicate to be thus tampered with. The great masses, however, do not stop to consider, but are ready to be carried away by the most flimsy arguments of the charlatan.

HEROIC SURGERY.—Prof. Volkman in his address before the International Congress, mentioned the following cases of heroic surgery, recently and successfully performed. For a large enchondroma in the costal pleura that occupied the left wall of the thorax, Prof. Fischer removed a large piece of the chest-wall and ribs, so that the heart and lungs were exposed, and an opening as large as a child's head was made, and yet the patient was able to be discharged from the hospital after four weeks.

In the case of a large echinococcus of the liver, which in front and at the side was covered with thick layers of liver tissue, and which projected into the thoracic cavity, after resection of the seventh rib, he opened the healthy pleural cavity, which was free from adhesions. The thorax was freely opened, the thinned diaphragm cut into, the echinococcus sac opened, the animal bladder extracted *in toto*, and the patient recovered without complication. A similar operation, with like results, was conducted by Mr. Israel of Berlin. Mr. Hahn, also of Berlin, in two cases of wandering kidney, where the mobility and the discomfort induced thereby had attained an unusually high degree, drew out the organ in question through a large wound in the loin, and sewed it into the same. Both patients recovered and lost their pain. The opening of the joints seems a most innocent performance. Hips and knees are cut open, in order, in a case of luxation, to search for the obstacle which opposes itself to reduction, to suture the ruptured tissues, and in obscure symptoms to clear up the diagnosis *in vivo* by means of autopsy. More than two hundred times, he alone, without in one in-

stance bad results following, had incised, drained, and washed out diseased knee-joints without exciting suppuration.

MEDICAL COLLEGE ANNUAL DINNERS.—During the present month the usual annual dinners of the medical schools in this city will take place. These reunions of past and present students, practitioners, and teachers, are always looked forward to with a good deal of interest, and pleasureable anticipation. It affords an opportunity of coming together and joining in friendly intercourse, and of renewing acquaintances which otherwise might become forgotten or lost entirely. The *British Medical Journal*, in commenting in a recent issue, on the custom in England, says, "the hospital dinners of this session appear to have been very successful, and the habit of coming up to attend the opening meetings of their old medical schools, appears to be growing among practitioners of the country. Nothing could be more agreeable than the reunion in which past students, teachers, present practitioners, and students join in the common act of homage to their Alma Mater, and renew or form new ties of friendship and interdependence based upon community of interest in the hospitals and schools around which centre pleasant and fruitful reminiscences of the past, and large and generous hopes for the future. The hospitals and medical schools are, in the medical profession, what universities are in other professions, and the sentiment of attachment to the old hospital and school in which the days of studentship were passed, is an influence wholly good, and one which it is part of the result of a liberal education, and one of the elements of a high-toned professional life, to cultivate and cherish."

ANOTHER CARD OF THANKS.—In the *Perth Expositor*, of Oct. 25, appears a letter of thanks from one McTavish, of Lombardy, to Dr. ——. for having "cured his son of a running sore on his leg, after no less than seven doctors had failed." We cannot assume for one moment that the Dr. named had aught to do with the insertion of this letter. The author has no doubt inserted the letter, and paid for it as a special advertisement, alongside of Cluthe's Spiral Truss, St. Jacob's Oil, Fowler's Extract of Wild Strawberry, and Burdock Blood Bitters, in order to acknowledge

to the world, at the same time, the doctor's great skill and "McTavish's" unbounded generosity. In paying the doctor for those services which he is so anxious to make public, he says, "he held in his hand a sum of money which he would gladly have paid, but the doctor's charge was fifty dollars less than the sum he held." McTavish! Be generous! Go and pay the doctor that fifty dollars and relieve your conscience. We are certain he is entitled to it, and as much more, or his case is different from that of the majority of his confrères.

DR. THEOPHILUS MACK.

As we go to press we have received the sad intelligence of the death of Dr. Theophilus Mack, of St. Catharines, in the 61st year of his age. Dr. Mack was well known to the profession and public in Canada and the United States, especially through his connection with the mineral springs and Springbank Hotel, which have been the resort of health and pleasure-seekers from all parts of the continent. The deceased was a native of Dublin, Ireland, and emigrated to this country in 1829. He studied medicine in the United States, and graduated in the Geneva Medical College, N. Y., in 1843, and subsequently received the licence from the Upper Canada Medical Board in the same year. He was the founder of the St. Catharines Marine and General Hospital, and School of Training for Nurses. He paid close attention to his professional duties, and had acquired a well-earned reputation for skill and intelligence in his profession. His loss will be sadly felt by a large circle of friends and admirers, besides by many to whom he ministered.

THE PRINTOGRAPH.—This modern invention for the copying of letters, circulars, etc., is a great convenience to the literary and commercial public. We have had one of Pim's Royal printographs in use for some time and find it a most useful, nay almost indispensable article. From one to two hundred legible copies of a letter or circular can be taken from a single original, in a few minutes, by means of this useful invention. There can be but one opinion regarding the utility and value of the printograph.

VACCINATION AS A PREVENTIVE OF HYDROPHOBIA.—A report is going the rounds of the daily press, that a veterinary surgeon, Dr. Galtier, of Lyons, France, has discovered a remedy for rabies. He injected the saliva of a mad dog into the veins of ten sheep, and at the same time placed the saliva of the same dog in contact with the nerves of ten other sheep. The latter all died with every symptom of rabies, while the other ten remained perfectly well. He also ascertained that when the virus of rabies was injected into the veins of sheep it was impossible to produce rabies in them by any subsequent experiments. He claims, therefore, that hydrophobia is purely a disease of the nerves, and that to inject the virus of rabies into the circulation, is a certain protection against the disease, at least in the case of sheep. Although it may seem improbable that protection against hydrophobia can be secured by the method proposed by Dr. Galtier, this is no argument against it. Nothing could seem more improbable than the assertion that to inoculate a person with the cow pox would secure immunity from small-pox; but experience proved that Jenner was right. If Dr. Galtier has really found a sure protection against hydrophobia, he will deserve to rank with Jenner in the gratitude of mankind.

DR. MCLEAN'S MALPRACTICE SUIT.—In our last issue we alluded to a suit for malpractice recently instituted against Dr. McLean of Ann Arbor. Dr. McLean denies the plaintiff's allegation *in toto*, and we have his authority for saying that the records of the Supreme Court of Illinois denounce his assailant as a swindler in the plainest terms. The Dr. also has unimpeachable expert evidence to prove that there was nothing unusual or improper in his treatment of the case, nor in the result which followed it.

JOHNSTON'S FLUID BEEF.—This preparation of fluid beef has now been before the public and the profession for several years and is every day growing in public favor. It is not only extensively used in Canada wherever its merits are known, but it is also extensively used in Hospitals and Asylums in Great Britain and the Continent. Several months ago we were shown through Mr. Johnston's establishment in Montreal, and were much interested in the process of manufacture.

Johnston's method is different from the ordinary method. He first makes an extract of beef, similar but superior to that of Liebeg, to which is added the lean of beef in a finely pulverized state. The beef is partially cooked and carefully dried at a certain temperature, and is then reduced to powder by powerful machinery. A certain proportion of this finely powdered beef is then added to the extract before canning. This process of amalgamation is a very tedious one, requiring about four hours to complete it. The powdered beef has to be added slowly so as not to make the fluid lumpy. Johnston's fluid beef has been shown by analysis to contain salts of flesh and moisture, or or beef-tea food, 33.30; albumen, 22; fibrin, 35.50; mineral, 1.70. He is continually in receipt of testimonials as to the value and efficacy of his fluid beef in all classes of cases. We have used it extensively in our practice, and can fully endorse it as a most reliable and valuable liquid food for invalids.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The above-named College held its semi-annual meeting in Quebec, on the 28th of September, Dr. R. P. Howard, President, in the chair. The following Governors were present:—Drs. Austin, Belleau, Bonin, Comé, Campbell, Craik, Gervais, Gingras, Gibson, Hingston, Kennedy, Ladouceur, Lafontaine, Lemieux, Laberge, Lachapelle, Marmette, Marsden, Perrault, Parke, Rinfret, Rotot, R. F. Rinfret, Rodger, Rosseau, Hon. T. Robitaille, Hon. J. J. Ross, Sewell, St. George, and Worthington.

After routine, the following motion was adopted,—"That this Board has learned, with deep regret, of the death of Dr. F. A. H. Larue, Professor in Laval University, a gentleman distinguished alike for his medical and scientific attainments, and whose reputation extended not only throughout the entire Dominion, but also to the neighboring Republic. This College, of which he was so long a member, desires to express to his family and relatives its sincere sympathy in their bereavement."

After the transaction of ordinary business, the following graduates received the Licence, on presentation of their diplomas:—Drs. C. N. Barry, A. C. G. Delery, L. G. P. DeBlois, G. Demers, P. A. Gavreau, A. Gibeault, W. L. Gray, G. Huol, J. E. Lemaître, N. Mercier, G. T. Ross, A. Trudel,

F. N. R. Spendlove, R. H. Wilson. Dr. T. J. Symington, of Camlachie, Ont., obtained the licence after passing a successful examination.

OPERATION FOR STRANGULATED HERNIA.—Mr. Paul Swain, in a paper on this operation, *Brit. Med. Journal*, objects to the usual practice. After the first incision through the skin, a bit of tissue is pinched up with the forceps and nicked with the scalpel, so that a director can be introduced under the tissue which is then divided by the scalpel. But unless the scalpel be very sharp the tissues recede before it, and it is very difficult to keep the deeper incisions as large as the superficial one. The scalpel is also very apt to slip off the director. Mr. Swain uses, in place of the scalpel and director, the blunt curved scissors used for extirpation of the eyeball, and finds that the operation can thus be performed with greater rapidity, neatness and safety.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.—The following officers have been elected for the ensuing year:—*President*, Dr. George Ross; *1st Vice*, Dr. R. A. Kennedy; *2nd do.*, Dr. T. A. Rodgers; *Treasurer*, Dr. W. A. Molson; *Secretary*, Dr. O. C. Edwards; *Council*, Drs. F. W. Campbell, Roddick and Osler.

REMOVALS.—Dr. Morton has removed from Bradford to Toronto. Before leaving he was made the recipient of a silver tea service and a complimentary address at the hands of some of the residents of the former place. Dr. Going, of London, has also removed to this city. We welcome these gentlemen to Toronto.

CREDIT TO WHOM CREDIT, ETC.—The recipe in our last issue for improved tincture of iron was first published in the *Canada Medical and Surgical Journal*, and should have been credited to that journal. We extracted it from a foreign journal, in which it appeared among miscellaneous items, the original source not being mentioned.

PHYSIOLOGICAL TREATMENT OF PNEUMONIA.—In the *N. Y. Medical Record*, Sept. 10th, will be found an article by Dr. Everett, on the physiological treatment of pneumonia by means of the continuous inhalation of cold air at a temperature of 10° to 15° F. The patient's body is at the same time kept at a temperature of 80° to 85° F., and in this way the writer claims that the afflux of blood is changed from the central organs to the periphery.

In winter time the air may be introduced from the outside by an elastic tube attached to an inhaler, and in summer the cold air can be breathed through a refrigerator. He gives several cases in which this treatment proved satisfactory.

SULPHUROUS ACID IN THE TREATMENT OF GONORRHOEA.—Surgeon-Major Wilson contributes an article in the *Lancet* for September, on the above subject. He has treated sixteen cases of gonorrhoea by injections into the urethra of sulphurous acid and water, diluted 1 to 15, three times a day. When there is pain or chordee he uses the injection only once or twice daily. The majority of cases treated were second attacks. The purulent discharge soon become scanty, and in two or three days becomes thin and gleeety. When this watery condition occurs the remedy should only be used once in twenty-four hours. The patient should be kept quiet and placed on a moderate diet. Recovery is rapid and satisfactory.

PUTTNER'S EMULSION OF CODLIVER OIL.—This preparation has now been before the profession for some time, and has been very highly commended by the physicians in the Maritime Provinces; and so far as we can judge of its merits, through a trial of it in several cases, we think its qualities are not at all over-estimated. It is prepared by C. H. Puttner, Ph. M., Professor of Pharmacy, Halifax Medical College, N. S., and the preparation is endorsed by many of the leading physicians in Halifax and other places. We would bespeak for it a thorough trial by the profession of the Dominion, and we feel assured it will not disappoint.

A HOSPITAL AMBULANCE.—Through the private munificence of a lady of this city, a sum sufficient to purchase a Hospital ambulance was recently placed in Dr. O'Reilly's hands. The ambulance was built by Mr. M. Guy, carriage builder of this city, in the most approved style, and will be kept at Bond's livery stables on King Street, ready for use at a moment's notice.

THE VALUE OF BACELLI'S SIGN.—The difficulty of distinguishing before operation, between serous effusion in the chest cavity and empyema is well known. Dr. Bacelli of Rome, maintains, that in a case of pleuritic effusion, if the whispered voice is well conducted and pectoriloquous in character when listened to through the thickness of the fluid, it may be regarded as serous. On the contrary, if the whispered words are ill-conducted,

or inaudible, the fluid will be found to be purulent. Dr. Bacelli is supported in his views by Prof. Semmola of Naples, and Dr. Theophilus Williams, of London, both of whom attach great value to this sign.

APPOINTMENTS.—Dr. T. W. Mills, L.R.C.P., Lon. has been appointed assistant to the chair of Physiology, McGill Medical College, Montreal.

Dr. H. J. Saunders, M.R.C.S., Eng., has been appointed Prof. of Sanitary Science, in the Royal College of Physicians and Surgeons, Kingston.

Dr. J. H. Burns of this city has been appointed on the acting staff of the Toronto General Hospital, *vice* Dr. Canniff resigned.

Dr. Richard Gundry, medical superintendent, Spring Grove Asylum, has been appointed Prof. of Materia Medica, Therapeutics, and Mental diseases, in the College of Physicians and Surgeons of Baltimore.

An error occurred in the heading of the article in last month's issue on "Cold Water Treatment of Scarlatina," by "A. Worthington, M.D., Iroquois." It should have been A. Worthington, M.D., Clinton, Ont.

Books and Pamphlets.

COULSON ON DISEASES OF THE BLADDER AND PROSTATE GLAND. 6th edition. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This book will be found a valuable repertory of the pathology and treatment of the affections of the above-named important organs. It is our belief that errors of diagnosis, and consequent misadventures in the management of cases of vesical and prostatic troubles, are not uncommon. Within the past summer we had the painful occasion of detecting, in a moribund octogenarian, a largely distended bladder, resulting from a prostatic hypertrophy which had escaped detection, and had caused the patient distressing and protracted suffering. The timely and skilful employment of the catheter would have saved the patient from days and months of unrest and agony.

Whenever an old man is found to be troubled with frequent requirement of micturition, associated with tardiness and triviality of urinal discharge, the condition of the prostate gland should command prompt attention. In the case above instanced it seemed to have been no more dreamed of, than though no such organ existed.

MEDICAL ELECTRICITY. A Practical Treatise on the Application of Electricity to Medicine and Surgery. By Robert J. Bartholow, M.D., Jefferson Medical College. 8vo., pp. 262, Illustrated. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

The author in his preface says, "that there are excellent works on medical electricity is undeniable, but some of them are too voluminous, others too scientific, and not a few wanting both in fullness and accuracy." He has endeavoured to avoid these errors, by preparing one so simple in statement that a student without previous acquaintance with the subject may readily master the essentials; so complete as to embrace the whole subject of medical electricity, and so condensed as to be contained in a moderate compass.

The work is divided into six parts. Part I.—Electro-physics is devoted to a description of the various instruments in use. Part II.—Electro-Physiology treats of the action of electricity on the different structures of the body. Part III.—Consists of an elucidation of electro-contraction and electro-sensibility. Part IV.—embraces a *resumé* of all that is known on the subject of electro-therapeutics, and is the most interesting part of the work. In his opinion one of the popular modes of applying electricity by means of the "electric bath," produces but little effect, so great is the resistance offered by the water to the progress of electricity. Charlatans who apply this method on their ignorant clients, impose upon them by connecting the electrodes with some part of their body. No matter how carefully applied, the electric bath is a very inferior application. General electrization comes in the same category. Part V.—Is devoted to the consideration of Electricity in Surgery, as the use of the galvano-cautery, electrolysis, and also the best forms of apparatus. He also describes Plante's cell for storing up electricity. In Part VI. he discusses thermoelectricity, differential thermometry, &c. The work is upon the whole one which we can heartily endorse in nearly every particular.

A COMPEND OF ANATOMY. By J. B. Roberts, A.M., M.D. Second edition. Revised. Philadelphia: C. C. Roberts & Co. Toronto: Willing & Williamson.

This little work is designed as a short guide to the student in the dissecting-room, and as an aid

in following the lectures on anatomy. It is of convenient size to be carried in the pocket, and is only intended as a ready reference—not to supplant the ordinary text-books on anatomy—and as such it will prove useful. Of the kind, it is a most excellent little work.

THE PHYSICIAN'S VISITING LIST for 1882, by Lindsay & Blakiston: Philadelphia. Thirty-first year of publication.

We have just received from the publishers a copy of this deservedly popular visiting list. It is neat, compact, simple in arrangement, easily carried in the pocket and invaluable to the medical practitioner. It is also a companion which may frequently be consulted with advantage, containing as it does an almanac, Marshall Hall's ready method in asphyxia; poisons and their antidotes; the metric system of weights and measures; a posological table, and table for calculating the period of utero-gestation. They are arranged for 25, 50, or 100 patients, weekly.

INDEX CATALOGUE of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Vol. II. Berlioz-Cholas. 4to. pp. 990. Washington: Government Printing Office, 1881. From the Surgeon-General U. S. Army.

We are pleased to receive the second volume of this magnificent work. It is, as far as possible, an index of all the medical literature of the world that is accessible. The nature of the task before the compilers may be gathered from the fact, that two large volumes have been published and they have only reached the letter C. in the alphabetical order.

Births, Marriages and Deaths.

On the 28th of September, J. R. Fraser, M.D., of Metcalfe, Ont., to Ella, third daughter of the late Stuart Evans, Esq., of Montreal, Que.

In Galt, on the 13th ult., of diphtheria, Agnes Cranston Graham, beloved wife of Dr. J. P. Brown, aged 30 years.

On the 19th ult., J. G. Bibaud, M.D., Prof. of Anatomy, Ecole de Medicine, Montreal.

At St. Catharines, Ont., on the 24th ult., Theophilus Mack, M.D., aged 61 years.

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Original Communications.

ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.

BY A. M. ROSEBRUGH, M.D. SURGEON TO THE TORONTO EYE AND EAR DISPENSARY.

Read before the Toronto Medical Society, Nov. 17th, 1881.

Recently there has been a revival of the use of static or franklinic electricity in medicine, and important sedative and tonic effects are claimed for it. It is claimed by others, however, that these sedative and tonic effects are not equal either in variety or degree to those obtained by general faradization and central galvanization, and that they should be much superior to them, to compensate for the great practical difficulty in using static or franklinic electricity. It is claimed, moreover, that much as electricity is now used by the profession, it would be used still more were it universally known how valuable it is (as a general sedative and tonic) in the treatment of neurasthenia, hysteria, hysteroid diseases, certain phases of epilepsy, neuralgia, dysmenorrhœa, amenorrhœa, exophthalmic goitre, and in the sequelæ of certain acute diseases.

In the preparation of this *resumé* of practical eletro-therapeutics the following works have been consulted:—"Medical electricity," by Julius Althars, M.D., F.R.C.P.L. (1873). "The clinical use of electricity," by J. Russell Reynolds, M.D., F.R.S., (1874). "Clinical electro-therapeutics," by A. McL. Hamilton, M.D., (1873). "Lectures on electricity," by A. D. Rockwell, A.M., M.D., (1879). "Medical and Surgical electricity," by Beard and Rockwell, (1878 and 1881), and "Medical electricity," by Roberts Bartholow, A.M., M.D., LL.D., (1881).

PARALYSIS FROM DISEASE OF THE BRAIN.

In treating cases of *paralysis from disease of*

the brain, (hemiplegia), the faradic and the galvanic batteries, are both required; the latter should contain 12 or 18 cells. The localized faradic current, applied just strong enough to cause muscular contractions, may be applied to the affected muscles within a week or two of the attack, and two or three weeks later a continuous current from 8, 10, or 12 cells of the galvanic battery may be applied to the head, back and side of the neck. A few weeks later still, the faradic current may be used as a tonic in the form of general faradization. In treating the paralyzed muscles, good results have been obtained both from the faradic and the galvanic current, but the best results may be expected from their combined use. The treatment may be commenced with the galvanic current, slowly interrupted, and followed by the use of the faradic current. Paralyzed muscles respond more readily to a slowly interrupted galvanic current than to the momentary flashing to and fro of the induced faradic current. Hence, in cases where farado-muscular contractility is very much weakened, or entirely absent, the galvanic current is used until the muscles respond to the faradic as well as to the galvanic current.

In using the galvanic current for paralysis of the arm, for instance, a large sponge electrode, well wetted, (usually the positive), is placed on the shoulder, and the other sponge electrode, also well wetted, is slowly moved down the arm, on all sides, so as to bring all the fibres of each muscle under the influence of the current *seriatum*. When one or both sponges are movable it is called a *labile* application, and when both are stationary it is called a *stabile* application. An application of the galvanic current made *labile*, is practically the same as an interrupted current, and when the application is thus made, a special current interrupter is not necessary.

A battery with 12 cells is sufficient for making these peripheral applications. The current should be used daily, or in alternation with the faradic current. The weakest current is to be used that will cause contractions when the current is interrupted; and it is a curious fact, that a paralyzed muscle will, in some cases, respond to a weaker galvanic current than the corresponding healthy muscle. These reactions are called *the reactions of degeneration*. In using either the galvanic or the

faradic current, the muscles should not be fatigued. A few seconds to each is sufficient.

In using the faradic current, for instance to the arm, instead of keeping one electrode in a fixed position on the shoulder, the two electrodes kept together—preferably by holding the insulated handles in one hand—are slowly moved over every part of the paralyzed muscles. More vigorous contractions will occur and with less pain, by making the application in this manner.

After the muscles of the arm and fore-arm are put in a better condition, special attention must be given to the muscles of the hand, and the applications made to individual muscles—first with the galvanic and afterwards with the faradic current—by means of small metallic electrodes covered with flannel or chamois, and well wetted. Duchenne's olive pointed electrodes are the best for this purpose.

In applying galvanism to the head, great care is necessary. The current should not be broken abruptly. The sponge electrodes should be kept steadily in one position, and the current gradually increased from the minimum to the maximum, and as gradually decreased to the minimum before the sponges are moved. In the Bartlett battery this is accomplished with the commutator or current-selector, and in the McIntosh battery, by means of a bifurcated cord-electrode and a step-by-step arrangement. When great care is used, I find that the same end may be obtained very simply, by using large sponge electrodes and modifying the strength of the current by moderate or firm pressure on the sponges. A maximum of say 12 cells are put in circuit and the positive electrodes applied with very gentle pressure to the forehead. The negative is next very lightly and cautiously applied to the nape of the neck, and the pressure on the sponge very gradually increased, and afterwards the pressure increased on the positive electrode. On removing the sponges the process is reversed. It is well to bear in mind that the sudden opening of the circuit either by the sudden withdrawal of an electrode or by the loosening of the wire connections, will cause a shock even greater than that caused by the sudden closing of the circuit. The positive electrode is applied over the eye or on the temple of the side affected, and on the side opposite to that of the hemiplegia. Another plan is to apply the nega-

tive pole over the stomach, while the forehead, top of the head, nape of the neck, spine and cervical sympathetic are brought successively under the influence of the positive pole,—the same as in central galvanization.

In hemiplegia, much benefit is derived from passive motion of the limb, kneading of the muscles—doing it thoroughly and systematically—and applying dry heat. The skin should be well soaked with warm water before each application of the electrodes, and when the electrode is applied to a muscle, the patient should at the same time make an effort to contract it. Both at the time of the application and during the interval, the paralyzed muscles should be kept relaxed.

The prognosis is good in those cases where the electro-muscular contractility is simply diminished but not altogether lost. It may be even lost to the faradic current, but if there is any response to the slowly interrupted galvanic current, the case is susceptible of great improvement.

The prognosis is bad in two class of cases, first where there is absolutely no response either to the faradic or the galvanic current, and second, where the paralyzed muscles are plump, well-nourished, and respond normally to the faradic, as well as to the galvanic current.

Paralysis from Disease of the Spine.—In *paraplegia*, applications are made both to the spine and to the affected muscles, and both the faradic and the galvanic currents are used. In the acute stage, the treatment is confined to the muscles. The local treatment must be commenced promptly, to prevent wasting and degeneration. After all the acute symptoms have subsided, the spine is to be treated with the galvanic current and from 18 to 36 cells used. The sponge-electrodes—large and well wetted—are applied, the negative to the sacrum and the positive to the upper part of the spine. The latter is passed slowly down and on each side of the spine, so as to include the spinal nerve roots, and the sponge is rested specially on any tender points. Galvanization of the spine is also used in *chronic myelitis*, and striking results are claimed for it. A powerful battery is required, some using as high as 60 cells. The skin and the electrodes are well wetted and the current allowed to flow about two minutes.

The local treatment is commenced early and the applications made at first with the galvanic current.

Later, the faradic battery may be used, if the muscles respond to the faradic current. The weakest current is employed that will cause contractions.

Infantile Paralysis.—The electrical treatment in infantile paralysis should be commenced immediately after the termination of the fever. The galvanic battery is used, the negative pole being placed on the sacrum and the positive pole on the spine, just above the upper level of the diseased part of the cord. After one or two minutes, the negative electrode "is passed over the affected muscles in turn below, making each one contract several times,"* but fatigue is to be avoided.

A battery power of from 12 to 18 cells is used, and with the positive electrode above the diseased part of the cord and the negative on the muscles, the applications may be partly *labile* and partly *stable* and the entire *seance* made to last from five to seven minutes.

The good effects of galvanism in these cases is due, according to Onimus et Legros, not so much to muscular contractions, as to its influence over the circulation, and over nutrition, and over the trophic system.

Peripheral Paralysis.—The best type of peripheral paralysis is that of facial paralysis. It may be caused by rheumatism, by injury, or by neuritis from disease of the middle ear. These cases are treated locally only. At the outset the galvanic current is used, and when nutrition is sufficiently restored to enable the muscles to respond to the faradic current, the latter is used to complete the treatment. In using the galvanic current, the positive electrode is applied over the seventh nerve in front of the ear, and the negative electrode is applied to the peripheral portions of the nerve. For the first few days a continuous current, from 12 or 18 cells, is used. Subsequently, the application is made *labile* and only 6 or 8 cells used; or the least number of cells that will cause contractions when the current is interrupted. The applications are made daily and for only a few minutes at a time. The muscles should be kept relaxed both during the interval and at the time of the application. The angle of the mouth may be drawn towards the ear and kept in this position, at least during a part of the time, by means of a metallic hook secured to a band fastened around

the ear. In case of ptosis, the upper lid is elevated and strapped to the forehead.

Lead Paralysis.—This disease usually takes the form of paralysis of the extensor muscles of the hand, although other muscles are sometimes affected. The electrical treatment is principally by means of local galvanization. The positive electrode is placed in the arm-pit or on the nerve-trunk and the paralyzed muscles are each in turn brought under the influence of the negative electrode, the application being *labile*. A current from 10 or 12 cells is used for about ten minutes at a time, daily. The patient may also be treated by general faradization and central galvanization.

Diphtheritic Paralysis.—The treatment of cases of paralysis from diphtheria and other acute diseases is by galvanization of the nerve centres (central galvanization) and galvanization of the paralyzed muscles,—a weak interrupted current, say, from 3 to 4 cells, being used for a few minutes daily.

Hysterical Paralysis.—In hysterical paralysis the affected muscles are always plump and well nourished, and respond both to the galvanic and the faradic current, but the skin is not sensitive to the stimulus of the latter.

The constitutional disease is treated by general faradization: the paralyzed muscles by local faradization—using moist electrodes—and the anæsthesia by the faradic current and the electric brush. A single strong application of the faradic current to the larynx, is, in some cases, sufficient to relieve hysterical aphonia.

Progressive Muscular Atrophy.—These cases are treated by central galvanization and the application of the galvanic and the faradic currents to the affected muscles, using the currents alternately.

Locomotor Ataxia.—These cases are treated by central galvanization and general faradization, and the anæsthesia by the electric brush.

TREATMENT OF PAIN.

According to Dr. Anstie, "The constant current is a remedy for neuralgia, unapproached in power by any other, except blistering and hypodermic morphia, and the latter is often surpassed by it in the permanence of its effect, while it is applicable in not a few cases where blistering would be useless." Dr. Bartholow says, "There is no fact more certain than the power of galvanism to relieve pain." Drs. Beard and Rockwell, while admitting

* Bartholow.

that true neuralgia is most successfully treated by galvanism, claim that "hysterical neuralgia and so called pseudo-neuralgia, which are simply forms of pain, occupying certain areas, and running seemingly in the direction of certain nerves, *yield most readily to faradism*." They claim also that the effect of *pressure* is a useful guide in selecting the proper current—that in the majority of cases where firm pressure over the affected nerve aggravates the pain, the galvanic current is indicated; and that in cases where firm pressure does not increase the pain, the faradic current is indicated. The faradic current is also most efficacious in certain forms of headache.

When the galvanic current is used in ordinary cases of neuralgia, a battery of 12 or 18 cells is used; but in rebellious cases of sciatica and lumbago, from 40 to 60 cells are sometimes required. The electrodes should be large and well wetted, but not with salt water. The applications are made daily, twice a day, and in some cases three times a day according to the severity of the case.

In *sciatica*, the positive electrode is placed over the nerve, either at its exit from the pelvis or in the rectum; and the negative electrode is applied by the labile and stabile methods over the distribution of the nerve. In recent cases from 12 to 18 cells are sufficient. The application is continued from 10 to 15 minutes. A bulbous insulated electrode is used in the rectum, and is directed to the position of the affected nerve.

In *lumbago*, the applications are made two or three times a day, at the outset; and afterwards, once a day. The electrodes are placed on each side, and strong transverse currents are used for about ten minutes at each application. The treatment may be commenced with 18 cells, and afterwards, a stronger battery used if necessary. A single application may give decided, though perhaps temporary relief; but in many cases perseverance is necessary.

In *cervico-brachial neuralgia*, the positive electrode, large and well wetted, is placed over the cervical plexus, and the negative is passed slowly over the shoulder, arm and forearm. The applications are made daily, and continued for 8 or 10 minutes. In recent cases 12 or 18 cells are used, but in old cases 24 or 36 cases may be necessary.

In *facial neuralgia* the positive electrode is

applied to the painful part, and the other to the back of the neck, or on the stomach or held in the hand of the patient. In using the galvanic current about the head or face, great care must be taken not to interrupt the current abruptly. The number of cells used should be determined in each case by the sensations of the patient; it should not be strong enough to cause pain but strong enough to cause a warm, tingling sensation. The faradic current is also useful in facial neuralgia. It may be applied with the hand of the operator. The patient takes the negative electrode in both hands, and the operator taking the positive in his left, makes the application with the fingers of his right hand.

In the epileptiform variety of this affection, galvanization of the brain and cervical sympathetic may be tried. It has been successful in relieving "a certain proportion" of these terrible cases.

In *headache*, the best results according to Beard and Rockwell, are obtained from the faradic current, applied in the form of general faradization—the negative electrode being applied to the feet or coccyx, and the positive to the head, back of the neck, and in some cases to the stomach and bowels as well. The current is applied to the head with the hand of the operator. In some cases central galvanization is found to be the most efficacious. General electrization is useful in preventing attacks of headache by the improvement which it imparts to the tone of the system.

In *pain of the stomach or bowels*, the best results are obtained from central galvanization—the positive electrode being applied to the back of the neck, just above the 7th cervical vertebra, and the negative to the part or parts affected. Dr. Bartholow applies the positive pole to the cervical sympathetics and pneumogastrics (behind the angle of the jaw) and to the dorso-lumbar enlargement of the cord. He also applies the positive pole to the rectum by means of an insulated electrode. In some cases he uses the faradic current—"a mild current for anodine effects, and a strong current to the dry skin as a counter-irritant."

DISEASES OF THE SKIN.

Dr. Althaus, in the third edition of his treatise on "Medical Electricity," published in 1873, devoted but a single paragraph to the electric treatment of skin diseases. It is as follows: "Dr. Beard has used his proceeding of 'central galvani-

zation' in certain diseases of the skin, such as prurigo, eczema, and lichen, with good results, without an application to the diseased surface. In obstinate cases of this kind, therefore, which do not yield to other treatment, galvanization deserves a trial."

Dr. Bartholow says that very brilliant results have been obtained from galvanism in the treatment of trophic affections of the skin. He employs galvanism with success in the treatment of *acne* (*acne vulgaris*). One electrode is placed in front of the ear and the other is passed over the eruption on the face, without reference to the direction of the current. From 5 to 10 cells are used. Scleroderma is also reported to have been cured by galvanism. In one case the positive electrode was placed on the spine, the negative applied to the diseased surface, and from 12 to 27 cells used. In using central galvanization in the treatment of diseases of the skin, Drs. Beard and Rockwell use a current from 12 cells. The negative electrode, large and well wetted, is placed over the stomach, and the positive electrode is applied to the head, neck, and the entire length of the spine. It is also applied to the cervical sympathetic on both sides, care being taken not to break the current abruptly. Electricity is also used for the relief of the pain of herpes, and the itching of prurigo. A mild galvanic current is used for the former and dry localized faradization for the latter. For anæsthesia, the faradic current and the dry metallic brush is used.

(To be continued).

THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF BRAIN DISEASE.

BY W. F. COLEMAN, M.D., M.R.C.S. ENG.,

Surgeon Eye, Ear and Throat, St. John, N.B.

(Read before the Canada Medical Association at Halifax, August 4, 1881).

MR. PRESIDENT AND GENTLEMEN,—Our knowledge of the physiology and pathology of the central nervous system is so limited, the diagnosis of brain lesions so difficult, the well-known conditions of the eye in those lesions so unmentioned or dubiously mentioned by the text-books on medicine, as to furnish me with some excuse for urging the claims of the ophthalmoscope in the study of the intra-ocular end of a brain nerve during its struc-

tural changes and in the diagnosis of diseases of the brain and cord. Though the matter may embrace a limited personal experience, and little originality, I freely admit the testimony of such authorities and special writers as Drs. Allbut, Jackson and Gowers, and Mr. Nettleship, and, incidentally, many others. While the nature of many diseases within the chest and abdomen is revealed to touch and the ear, the maladies of that most inaccessible part of the body—the cranium—give out no certain sound, and will not disclose themselves to any wizard's touch; so it remained for the genius of VonGraefe and Sichel, the patient, skilful labors of Sæmisch, Liebreich, Schweigger, Soelberg-Wells, Jackson, Allbut, Gowers, Hamilton and others to illuminate with the ophthalmoscope the dawning light through which men were eagerly striving to discover the nature and situation of intra-cranial diseases.

The popular idea that the oculist has, and perchance *needs*, no knowledge of general medicine to successfully treat the eye, is no less false than the, I fear, professional belief that the general practitioner can gain little from the ophthalmoscope. With the herculean task of acquiring a fair knowledge of the structure, working, derangement and repair of the general system, it is not to be expected that even a Hercules could also keep abreast of the information and experience in regard to any special organ. Yet, since the whole is made up of all its parts, and the parts are interdependent and dependent upon the whole, any approach to a comprehension of the whole organic system must involve some familiarity with every part. No more striking illustration of this can be cited than the evidence of cerebral lesions that may be elicited by an ophthalmoscopic examination of the intra-ocular end of the optic nerve, called the optic disc or papilla. In the pre-ophthalmoscopic period (prior to the great invention of Helmholtz in 1851), there certainly had been something done to trace the connection between amaurosis and brain disease in atrophy of the optic nerve, but a meningeal inflammation propagating itself along the optic nerve as a descending neuritis had not been thought of; and the cause is not far to seek, for in brain disease, accompanied by very considerable optic neuritis, the sight may be perfect, hence disease of the optic nerve was unsuspected. It thus happens that many patients having symptoms of brain dis-

ease, with some lesion of the optic nerve, have, on account of perfect vision, no disposition to consult an oculist, and while so few men in general practice use the ophthalmoscope, one most important sign of encephalic disease will be frequently overlooked. As the optic papilla is the chief intra-ocular part concerned, and furnishes the most palpable and constant information in intra-cranial disease, let us briefly consider the anatomy of the optic nerves. Under the name of the optic tracts, they take their origin just in front of the cerebellum, in the tubercula quadrigemina or optic lobes, to which visual perception is attributed, also in the corpora geniculata; they then pass forward along the under surfaces of the crura cerebri, taking on their way some fibres of origin from the optic thalami and reaching the olivary process of the sphenoid, just under the floor of the third ventricle, unite to form the optic commissure or chiasma. The distribution of the fibres of the chiasma sometimes enables us to fix the site of lesions interfering with vision, *e. g.*, the right tract supplying optic fibres to right half of each retina, and the left tract fibres to the left half of each.

As the optic nerves pass forward from the chiasma they receive at the optic foramina a loose sheath, from the dura mater, which becomes lost in the sclera. The nerve is about $\frac{1}{8}$ of an inch in diameter, before it perforates the cribriform plate of the sclera, and contracts to $\frac{3}{4}$ of this diameter at its intra-ocular end, where it spreads out to form the internal layer of the retina. The nerve is also invested by a second close fitting inner sheath, which is continuous with the pia mater, and sends processes between the nervules of the optic bundle. Between this inner and the outer sheath is the vaginal space of Schwalbe, which is continuous posteriorly with the arachnoid space of the brain, and anteriorly within the posterior part of the sclerotic opening, is by some, said to be continuous with lymphatic spaces in the substance of the optic nerve, by others to be closed. Evidently the vaginal space may become distended by sub-arachnoid fluid, for there is *not* a reflection of the arachnoid at the optic foramen to prevent it. As the internal carotid artery emerges from the inner wall of the cavernous sinus, it gives off the ophthalmic artery, which after passing through the optic foramen gives off the arteria centralis retina; this enters the optic nerve, runs forward in its sub-

stance, perforates its disc near its centre, then subdivides and radiates to its distribution in the retina. The retinal venules, converging, unite to form the two venæ centrales, which pass out through the disc near the artery and in the nerve trunk unite to empty into the ophthalmic vein, which passes through the sphenoidal fissure and empties into the cavernous sinus.

Further and most important to the subject, the blood supply to the optic nerve and disc is according to Galezowski, independent of the ophthalmic artery (which more particularly supplies the retina) being part of the vascular system of the brain. He describes a posterior optic artery to the testes; a middle optic from the choroid plexus to the geniculata; and anterior optic from the middle cerebral to the optic tract; and capillary branches from the pia mater to the chiasma.

The appearance of the optic disc, the first time I discovered it with the eye mirror and a $2\frac{1}{2}$ -inch lens, struck me as resembling a cream-rose full moon, about the size of a large split pea, rising in a pink sky of surrounding choroid, which, by its contrasting color, gave a well-defined sharp border to the disc. The retinal vessels radiate irregularly from the nasal side of the centre of the disc, the larger branches, passing upward and downward, completely avoiding the temporal sides.

The changes in the disc produced by cerebral and spinal diseases are—*Congestion, Inflammation, and Atrophy*. The congestion of the disc may be a simple hyperæmia; if attended by œdema, it is the stanungs papilla of VonGraefe, the "choked disc" of Allbut, or ischæmia of the disc, or congestion papilla. In intra-ocular neuritis, or, as it is called, papillitis, the papilla alone may be affected; in other cases, the neuritis occupies the length of the optic nerve, as has been shown in autopsies by Allbut, Hulke, Virchow, etc. Atrophy of the disc may be primary or simple, or it may be consecutive as a consequence of papillitis. Authorities are in accord as to the great frequency of *optic neuritis* in intra-cranial disease. Annuske and Reich collected 88 cases of intra-cranial growths with ophthalmoscopic examinations and autopsies, and found ophthalmic changes in 75 per cent. By common consent, the most frequent cause of optic neuritis is intra-cranial tumor; next to it, meningitis. Cerebral abscess and softening are occasional causes, and hæmorrhage a very rare one. Tumor is nearly

always attended by optic neuritis (Hughlings-Jackson). Allbut writes: "My own opinion certainly is that changes either of a congestive, neuritic or atrophic character may be found in the discs at some time or other in the course of almost all cases of intra-cranial tumor." "From my own experience (Gowers) I should say that neuritis occurs in about four-fifths of the cases of intra-cranial growths." Encephalic disease may also manifest itself through paresis or paralysis of the ocular muscles, producing squint and double vision. That optic neuritis may possess diagnostic significance of brain lesion, the extra-cranial causes which produce, or are associated with, neuritis must be borne in mind, such as albuminuria, lead poisoning, the exanthemata, suppression of the menses, pernicious anæmia, loss of blood, exhausting diseases, neuralgia of fifth nerve, in rare cases secondary syphilis (Nettleship), and tumors in the orbit. It may occur idiopathically without obvious cause (Gowers). Simple *congestion* or *hyperæmia* of the papilla very commonly precedes atrophy. It is sometimes the expression of a state of congestion and degeneration of the whole optic nerve, but sometimes apparently limited to the disc (Gowers). It frequently is the first stage of tobacco amaurosis, the last being atrophy.

Choked disc, or *hyperæmia with œdema*, is the first stage of neuritis, and frequently associated with it. Its principal causes are said to be the same as produce neuritis, viz., tumors, meningitis, and hydrocephalus.

Primary atrophy of the disc is more frequently associated with locomotor ataxy than with any other disease. Often I have seen it occur without assignable cause, and once from a blow on the eye. Galezowski gives a table of 166 cases, embracing the causes of primary and consecutive atrophy.

Cerebral causes.....	40
Locomotor Ataxy.....	33
Traumatic.....	22
Alcoholism.....	13
Syphilis.....	12
Other causes.....	46
—166	

Allbut is of opinion that primary atrophy is generally due to mischief at the base (tumor), or to ventricular dropsy, which may compress and sever the nerves or tracts at some point in their course. From the evidence of Messrs. Critchett, Wordsworth and Hutchinson and others, and my own experience, I think that tobacco in excess will pro-

duce atrophy of the discs, though many deny it. To be able to distinguish between a *normal* appearance of the papilla and the inception of a pathological, much experience is required, and the attempt will soon prove the saying, "Pathology is but the shady side of physiology." A full-blown neuritis may be quite palpable to an amateur ophthalmoscopist, while an expert may be unable to decide as to a slight hyperæmia or say whether a disc is pale from incipient atrophy or decoloration. The indication of hyperæmia is an abnormal redness, which has a tendency to blur the edge of the disc. Comparing the eyes may give some help, and noting whether the redness increases from time to time. The signs of neuritis and choked disc are similar, and vary with the stage. In the first stage the disc is less swollen and red, and the edge, though blurred, may be still distinguished, while in intense papillitis the color of the disc is so blended with that of the surrounding choroid that it can be frequently distinguished only as the point of convergence of the retinal vessels. Impairment or loss of sight is the chief symptom in intense neuritis, though there may be marked neuritis without any impairment of sight. Pain in the eye is rare. Vision usually begins to fail first in one eye, and sight may fail completely in a few days or decrease very slowly. Restriction of the visual field is common, and color-vision may be defective. The neuritis of tumor is double, rarely unilateral. Dr. Jackson has pointed out that the neuritis often coincides in its onset with an obvious increase in the other symptoms of the cerebral tumor. It appears that neuritis is usually a late production of tumor. Dr. Jackson recorded one case in which a man had had symptoms of cerebral tumor for nine years; during the last three years his discs had been repeatedly examined and found normal; six weeks before death, neuritis was discovered.

The signs of atrophy are pallor and later depression of the disc, with shrinking or absence of the capillaries. When the atrophy is marked there is diminished vision, nearly always more considerable in one eye than the other. There is a concentric irregular marginal limitation of the field of vision. Frequently there is a defect of color-vision.

The relation of papillitis to intra-cranial disease is still a vexed question. I shall refer briefly to the principal theories. VonGraefe gave the first in 1859. He distinguished two cases. In one the

change in the disc (neuritis) was slight, with a tendency to invade the adjacent retina. In this case there was meningitis, and inflammation of the nerve trunk was found by Virchow, which inflammation was assumed to have been communicated to the optic nerve from the inflamed meninges, and to have descended the nerve to the eye. This Von Graefe designated, "descending neuritis." In other cases of considerable swelling, hæmorrhages and vascular distension of the papilla (stanungs papilla), accompanied by cerebral tumor, no signs of inflammation were perceptible on naked examination of the trunk of the optic nerve. This condition of the papilla he attributed to increased intra-cranial pressure, which obstructed the return of blood from the eye through the optic vein by compressing the cavernous sinus.

The theories of Schmidt and Manz are largely accepted in Germany. Manz showed that distension of the vaginal space around the optic nerve is frequent in neuritis, and believed the extension to be due to intra-cranial pressure or increase of sub-arachnoid fluid. Further, he found that injections into the subarachnoid space, of animals, passed into the sheath and caused fulness of the retinal veins, and in some cases transient redness and swelling of the papilla. Schmidt demonstrated that a colored liquid injected into the sheath passed into the lymph space of the nerve at the lamina cribrosa, and suggested that neuritis is produced by the irritation of the liquid passing into the lymph spaces.

A theory was put forward by Schneller, in 1860, extended by Dr. Hughlings-Jackson in 1863, supported by Brown-Sequard, and was formulated by Benedikt in 1868. It assumes that the tumor acts as a source of irritation, which has a reflex influence through the vaso-motor nerve upon the optic disc, leading to its inflammation. Of these theories, that which accounts for changes in the disc by inflammation of the meninges propagated along the nerve trunk, appears the best supported by the frequent determination upon *post mortem* and microscopical examinations of the conditions upon which the theory is based. Although neuritis may occur in tumor of any size or kind, in any part of the brain, it is rare in tumor of the convexity, while it is common in that of the base and most common in that of the anterior lobes (Russell-Reynolds).

Again, *meningitis* limited to the convexity is *seldom* accompanied by intra-ocular changes, while *basilar meningitis* is *usually* attended by neuritis. In many cases of tumor, a local meningitis in the vicinity of the growth and accompanied by inflammation of the optic tract has been found. Now the proximity of this *inflammation* of the basilar meninges (whether independent or the result of tumor) to the optic tracts makes its communication to the tracts highly probable, and the fact of the so common association of inflammation of the meninges and tract increases the high probability to a seeming certainty.

A case of Mr. Hutchinson's in which no distension of the retinal veins was produced, although the cavernous sinus was completely obliterated by the pressure of an aneurism, seems to go far towards destroying the theory of obstructed blood return from the eye by pressure on the sinus. The vaso-motor theory is rejected by Leber and a numerous following, on the ground that it involves a mechanism not known to exist and a complex relation of the optic nerve to all parts of the brain difficult to conceive.

I shall now give you condensed reports of a head case and one of spinal disease, with defective sight, under my care in the St. John General Hospital, and a head case with eye disease in the general wards:—

Jan. 31st, 1881.—P. G., æt. 43, says his sight began to fail after cutting his thumb and profuse bleeding ten years ago, and since then could see to read only very large type. Sight has been the same for past three years as at present.

Vis. Right Eye = $\frac{5}{10}$ = No. 15 Jæger 8";

Vis. Left Eye = $\frac{5}{10}$ = No. 18 Jæger 8"; not improved with glasses.

There is gray atrophy of both discs. Has smoked four to five pipes a day for past 23 years, and drank pretty hard for years up to four years ago, but scarcely any since. Is very nervous. Wakes in the morning with headache and sickness. Memory bad for two years past. Gait unsteady for two or three years. Walks as though he had taken a little too much. Diagnosis—Locomotor ataxy and atrophy of discs. Treatment—Stop smoking. R—Strych. sulph., gr. $\frac{1}{4}$; hypodermically and increase gradually.

March 4th.—Is getting gr. $\frac{1}{2}$ strychn. Vision,

right and left, increased to nearly normal. = $\frac{1}{8}$. R—Strych. sulph., gr. $\frac{1}{8}$. Strych. increased the staggering gait. R—Croton chloral, grs. v., and return to strychn. sulph., gr. $\frac{1}{8}$. 15th.—Discontinue strychn. sulph. R—Arg. nit., gr. $\frac{1}{12}$, and increase to gr. $\frac{1}{2}$, taken daily by stomach.

April 8th.—Vis. right eye = $\frac{1}{8}$. Discharged.

July 19th, 1878.—Mary Smith, æt. 20, single, lost the sight of right eye completely and suddenly three weeks ago. Pain came on in the brow the same day, before the sight failed, and has kept her awake most of the time since. Day before yesterday, lost the sight of left eye in the same way as the right. Has no perception of light. Pupils react very slowly to light. Has *white atrophy of both discs*. Patient very nervous, and has slight choreic movements. History—For two weeks last summer had constant pain in the top of the head, and vomited three or four times daily; denies syphilis. Family history—Lost three brothers and one sister in their first year. Treatment—Potass. iodid. grs. x., Tr. cinch. 3j., t. d.

July 24th.—No pain in head since yesterday. Pupils widely dilated and immovable; no perception of light.

Aug. 1st.—Patient drew attention to two syphilitic ulcers on calf of leg. Diagnosis—Syphiloma at the base, implicating optic nerves. 8th.—Vis. left eye: seeing position of window. Vis. right eye, *nil*. Stop Pot. iodid. R—Hyd. perchl. gr. $\frac{1}{2}$; Am. mur. grs. v.; Tr. nucis vom. m x.; t. d. 20th.—R—Ung. hyd. 5ss., rubbed into axilla and thigh on alternate days; Pil. hyd. grs. ii. twice daily.

Oct. 12th.—No ptialism. R—Pot. iodid. grs. v.; Sp. am. ar. 3j.; Tr. cinch. 3j.; t. d. Stop other treatment. 22nd.—Mouth very sore and mercurial fetor. Discontinue Potass. iodid. R—Pot. chlor.

Nov. 7th.—Vis. right eye, *nil*; left eye, counting fingers. 13th.—Repeat Pot. iodid. grs. x., t. d. 25th.—Vis. right eye, motion of fingers; vis. left eye, fingers, two feet, and sees to get about well. Left eye diverges when right eye fixes for near point. When the eyes are at rest, both look to the left.

Dec. 21st, '78, to April 9th, '79.—Patient had Strychn. sulph., hypodermically, gr. $\frac{1}{4}$ to gr. $\frac{1}{8}$, when gait was made unsteady, then gradually reduced to gr. $\frac{1}{8}$. Had tenotomy of the right internal and left external recti muscles. The hands are now

quiet, and patient much less nervous. Vis. right eye, perception of light; vis. left eye, $\frac{1}{2}$ to 6. Direction of eyes much improved, but still look slightly to left. Discharged; to take Hyd. perchl. gr. $\frac{1}{8}$, Strychn. sulph. gr. $\frac{1}{8}$; t. d.

June 5th, 1881.—J. B. Hansell, æt. 53, admitted into the general ward a few days ago. He is a muscular looking man, 4 ft. 10 in. high, weight about 130 lbs. Says for the past year he has had a very dizzy head and will fall any day in the road, soon gets up and walks off. The fall was always preceded by giddiness. Six months ago began to vomit about every second day, and soon after vomited every morning if he laid in bed up to 7 o'clock. When he rose earlier the vomiting did not come on. This continued up to last week, since when he has not vomited. During the past month, has had a pretty severe pain from the forehead to the back of the head, lasting an hour or two every day and has not seen to read. Memory failing for past year. Pulse 68, small and rather weak; skin normal temp. to touch; appetite good; bowels costive; sleeps well; whistles feebly; grasp of hands weak; flexion of forearms and legs strong; gait very unsteady and seems in constant danger of falling; patellar reflex normal; no lightning pains; urine normal; right ear hears the watch only at $\frac{1}{2}$ in., ordinary loud voice at 10 ft.; left ear hears the watch only at contact, or ordinary voice at 4 ft.; speech, broken Dutch-English, probably normal; smell normal; pupils slightly dilated by atropine; vis. right eye, counting fingers, 2 ft.; vis. left eye, counting fingers, 12 ft.; ophthalmoscopic examination shows intense optic neuritis, with hæmorrhages and infiltration of retina disc.

June 25th.—Right pupil half the size of left, left pupil a little smaller than an average pupil; right pupil reacts very slowly to light, left pupil reacts more but imperfectly; percussion on the temples hurts a little, on the forehead less; head 24 in. in circumference.

July 15th.—Last evening and this morning refused to take his medicine, saying there was something in it to poison him. Diagnosis—Tumor of the cerebellum, involving the tubercula quadrigemina.

July 24th.—The patient was discharged at own request.

Gentlemen, your patience must not be further

tried; I shall only add, if on account of any words of mine the ophthalmoscope shall aid you in the diagnosis of so obscure a class of diseases as those of the central nervous system, I shall think your time not wasted and myself more than repaid for this paper.*

SULPHUROUS ACID IN THE TREATMENT OF DIPHThERIA.

BY H. P. YEOMANS, M.D., MOUNT FOREST, ONT.

An epidemic of diphtheria commenced in Mount Forest and surrounding country about the 15th of November, 1878. During the first three or four weeks all the cases yielded to treatment, and recovery began on the third or fourth day. The following treatment was pursued. A mixture of sulphurous acid and glycerine, equal parts, was administered in doses of 10 or 20 drops every hour or half hour. Also a solution of tincture of iron and chlorate of potash (to which in some instances quinine was added) was given every three or four hours.

The temperature of the room was uniformly kept at 80°, and the air rendered moist by evaporating water continuously. December 15th, the character of the symptoms suddenly changed to those of diphtheritic croup; at the same time there was a fall of snow and the atmosphere became colder. From the 15th to the 28th of December these croupy symptoms appeared in nearly every case. They were treated by inhalations of carbolic acid and iodine, with warm vapor. During these thirteen days eight very severe cases were treated, one of which died. In the case that ended fatally, the temperature of the room which the patient occupied was not equably maintained, the thermometer ranging by irregular variations from 60° to 85°, owing to great carelessness on the part of the attendants. In two cases emetics were administered, with apparent relief for a few hours; one of these was a boy of 12 years of age, possessed of a weak nervous temperament and a constitutional predisposition to scrofulous affections. The croupy symptoms continued in this case from the morning of the 20th until the morning of the 23rd, after which they disappeared. The most scrupulous care was exercised by those having charge of this patient, in administering reme-

dies, nourishment and in maintaining a uniform temperature. The sanitary condition of the room occupied by the patient was also excellent in every respect. Convalescence was fairly commenced in ten days after the attack began.

In the case of a little girl 10 years of age, some peculiar symptoms presented themselves. The diphtheritic membrane covered the uvula, tonsils, fauces, and extended over the roof of the mouth into the nasal passages, and some patches also appeared on the lips. The tonsils were so swollen as to render deglutition impossible. This state of affairs continued four days. During this time the bowels were obstinately constipated and enemata acted very inefficiently. On the eighth day the membrane became loose on the roof of the mouth and gradually peeled off, leaving an ulcerated surface exposed. This ulcerated surface was extremely sensitive, and every effort made to take cold water or nourishment caused intense pain. The pain extended to the ears; sometimes it commenced suddenly and assumed a neuralgic character, without any apparent exciting cause, lasting for an hour or two, after which it would suddenly cease entirely. This intense pain continued at irregular intervals for five days and then suddenly disappeared. In this case the patient determinedly resisted all attempts to administer any remedies, and resisted so successfully that very little could be done to check the disease.

The treatment pursued during this epidemic in 1878 has been strictly adhered to ever since, with the most gratifying results. Diphtheria is very prevalent here during the fall and winter months. The drainage of the town is imperfect, which may account for its prevalence. Unfortunately, the centre of the business portion is lower than the surrounding parts, and consequently all the water flows down the gutters to the central part. From this point it is conveyed by covered drains across two blocks and allowed to remain in a half stagnant condition, until evaporation and soakage into the loose soil disposes of it. This part of the town is now being built up with residences.

As diphtheria is very common here, we have had ample opportunities to test the value of the treatment I have mentioned. It has succeeded so well that I feel it my duty to unhesitatingly recommend it to all who feel disposed to give it a trial. The objection to using a brush in applying any

* This article has also been published in the Can. Med. and Surg. Jour.

To the Lieutenant Governor in Council.

The Petition of the undersigned humbly sheweth :

That in other countries, statistics have shewn conclusively that many lives have been saved and much sickness has been prevented by means of a Government Sanitary Organization for looking after the health and lives of the people.

And it is very generally believed that there are many deaths and much sickness in this Province every year which might be prevented by a properly organized and equipped Provincial Health Board.

Your Petitioners, therefore pray that the matter of the public health will receive your earnest attention, and that a sufficient sum to meet the necessary expenses of the organization and working of such a Board of Health, may be placed in the Estimates for 1882.

And your Petitioners will ever pray, etc.

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remedy to the tonsils, is that the local application is unpleasant to children, difficult for the attendants to perform properly, and the brushing—even with a camel's hair pencil—irritates and sometimes causes an abrasion of the tender or partially ulcerated surface attacked by the diphtheritic membrane. These abrasions are well known to be the favorite soil on which these microscopical vegetable parasites delight to fasten, and on which they flourish. Therefore any remedy which can be applied efficiently without using a brush, is best. Glycerine is the best vehicle in which to administer sulphurous acid, because it is soothing and forms a protective covering over the tender diseased surface of the throat. When given in 10 or 20 drop doses, it retains the sulphurous acid in the fauces, so that its specific effects may be obtained. This mixture frequently repeated and given without any water, is constantly retained and acting remedially in the throat. As sulphurous acid is very volatile, it penetrates the nasal passages, operating there also quite as efficiently. I have only met with one case in which a child refused to take it, whose case I have reported with neuralgic symptoms. Numbers of cases have been treated here with no other remedy, and when any other has been used in my practice, it is the potassium chlorate and tincture of iron mixture, to which I alluded before.

PHENYLE AS A DISINFECTANT.

BY W. S. CHRISTOE, M.D., FLESHERTON, ONT.

About a year has transpired, since my attention was drawn to this substance, by R. Wightman, Esq., druggist, of Owen Sound, and who is one of the Canadian agents for it. It has undoubted qualities as a disinfectant, quite as good if not superior to carbolic acid for general purposes, requiring a smaller quantity to produce better results. Dr. C. Barnhart also testified to its undoubted properties as a therapeutic agent in malignant diseases, such as diphtheria and scarlatina maligna, using it as a gargle. I was induced to try it in extensive wounds and as a general disinfectant, and have not been disappointed. Here are a few cases in point:—

J. T., æt. about 50, who several years ago was badly frost-bitten in the foot, so much so, that from time to time the phalanges of the toes were dissected out, the other bones of the foot became

diseased—it was certainly in a very bad condition, causing him continuous pain, with large quantities of morbid looking pus escaping. Septicæmia was evidently doing its work, for he became constitutionally sick. The question of amputation had to be decided; the patient urged it at once, but I could see nothing but disaster unless I succeeded in rallying his system. I suggested delay and applied myself diligently to build him up; partial success was the result. At length the case became so urgent, the foot was amputated, and sufficiently above the ankle to secure a good flap from the anterior part of the leg. Everything appeared satisfactory, the shock was not so great as expected, and I began to flatter myself with the success achieved. But it didn't stay in that condition; for although I had taken the precaution to allow a proportionately long flap for the emaciated leg, I began to fear I would soon have none at all; it sloughed extensively and was exceedingly unhealthy. At this point, phenyle was used, one tablespoonful to the pint of cold water, forming a milky solution. This was applied unremittingly, and with constitutional treatment, in a brief period healthy pus manifested itself, so that after all the contretemps, a good stump was the result; my patient made a rapid and successful recovery.

Another case was a child with necrosed bone. Inflammation of the tibia took place two years ago, and what occurs sometimes, and is curious, occurred in this case: another bone, the clavicle, was inflamed at the same time. Operation was desired and was performed by myself and an assistant. After applying Esmarch's bandage, an incision was made the whole length of the shaft, and the new growth encasing the old bone was chipped out the whole length of the incision, sufficiently to allow the removal of the dead bone. In this case I also used phenyle and found it equally efficacious for a good recovery.

A few cases of minor operations, such as compound fracture of finger and amputation thereof, are the sum of my experiments with it. In all, however, I placed every confidence in it, and was not disappointed. It deserves an extensive trial.

“Those who in the study of the sciences do not consult nature, but authors, are not the children of nature; they are only her grandchildren.”—*Da Vinci*.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in Wingham on the 4th of October, Dr. Sloan, president, in the chair. The following members were present.—Drs. Sloan, Holmes, Worthington, Tamblyn, Bethune, Graham, McDonald, Gillies, Young, Duncan, Mackid, Hurlburt and Stewart.

Dr. Mackid showed a woman, æt. 65, who has an abdominal tumor, occupying a great portion of the right abdominal cavity. She first noticed it 4 months previously. Its true nature was not decided on.

Drs. Stewart and Hurlburt showed the following cases :—

1. A case of *Locomotor Ataxia*. The patient is a man, æt. 43. He was first seen on the 5th of September, when he complained of pains in his legs, thighs, arms and belly, and of an inability to walk in the dark. He had gonorrhœa 20 years ago, but he never had syphilis. The pains first troubled him 12 years ago, while he was working in the lumber woods of Wisconsin. His occupation was that of a driver, and he had to sit for hours on the cold logs, and it is to this cause that he attributes his trouble. The pains have been gradually getting severer. For nine months he has been unable to work. The first difficulty in walking was noticed five years ago.

Present state.—There is no loss of motion. The sensation of the lower extremities and that part of the left arm supplied by the median nerve is markedly delayed. He requires from six to eight seconds to appreciate a painful sensation in these parts. Simple brushing of the hair of the legs causes more pain than severe pinching. He is able to tell a hot from a cold application. When his eyes are shut, he is unable to touch his nose with either index finger. Neither can he point correctly to the position of his feet. There is complete absence of the knee reflex. There is no ankle clonus. He says that he is able to retain his urine for 48 hours, without causing him any inconvenience. When he attempts to empty his bladder, he is compelled to strain. Bowels move about once in three days regularly. The pupils contract to light slowly. The reaction to accommodation is normal. There

is no contraction of pupils, squinting, or loss of color vision. There is distinct atrophy of both discs. Vision is fair. He at times complains of severe pains in the stomach. He says that he has a feeling as if 100 lbs. weight was compressing his back. He is unable to stand or walk with his eyes closed.

A full clinical account of this case, with a detailed description of the effects of stretching the right sciatic, which operation was performed since the meeting of the Association, will be reserved for a future occasion.

2. A case of probable tumor of the left cerebral motor region.

The patient, a girl, æt. 14½ years, was first seen in January, 1880, when she complained of loss of vision in the left eye and headache. Family and personal history good. No syphilitic or tubercular history can be made out. Father and mother both in good health. She was quite well up to three years ago, when she was seized with headache—confined to the left parietal region—and vomiting. After these symptoms had been present for about three weeks, she noticed that she had lost completely the sight of the left eye. The headache and vomiting left shortly afterwards, but have recurred frequently since. The following was her condition in January, 1880:—She is medium sized, spare, and listless looking; cheeks flush frequently. The pulse is 90 and temp. normal. There is nothing abnormal to be discovered about the heart, lungs, liver, or spleen. Her appetite is poor, and the bowels are costive. Abdomen retracted. Marked tache cerebrale. *Left eye*—Slight upward and internal squint. The arteries of the fundus are small and have no white lines accompanying them. The disc is greyish white, small and cupped. *Right eye*—The disc is larger and of the normal color, but there is some cupping. Vessels small. Fundus otherwise normal. The media are normal in both eyes. The sight of the right eye is good. Left pupil is dilated, right is normal.

From this time (Jan. '80), for a period of about four months, she took pot. iodid. grs. xxx. daily. Shortly after commencing the iodide, the headache disappeared and has not returned. About five months ago, right hemiplegia set in, and at the present time, the right arm is completely useless. She is able to walk, but drags her right leg considerably in doing so. Both hemiplegic limbs are

atrophied. There is no rigidity. The right knee reflex is greatly exaggerated.

Drs. Stewart and Hurlburt also showed the fragments of a phosphatic stone, weighing two ounces, which they removed from the bladder of a girl, æt. 16. The stone had formed around a hairpin which had been introduced 18 months previously.

Dr. Graham, of Brussels, showed a man, 50 years of age, who has apparently recovered from both a psoas and lumbar abscess, depending on disease of the dorsal vertebræ. For several months this patient has been troubled with catarrh of the bladder and bacteruria. The fresh urinary deposit is composed principally of pus cells and bacteria termo. For this condition he has been taking, with great benefit, eucalyptus internally, and injections into the bladder of the disulphate of quinine.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Lancet).

The regular quarterly meeting of this Board was held October 11, 1881. An interesting feature was a report by the Secretary relative to work of other State Boards of Health. The Secretary of the Michigan Board desires to continue to receive information from other Boards, by which these reports may be made quarterly.

A report relative to work of local boards of health showed increased activity on the part of local health authorities, in the way of isolating those infected with communicable diseases, and enforcing the law, requiring from householders and physicians notices of such diseases. In one city a physician had been fined \$100 for not reporting cases of diphtheria.

The revised document on the restriction and prevention of Scarlet Fever was adopted, and ordered to be published in English, Dutch, and German. The consideration of this document involved a discussion of the question of recommending health officers to verify diagnoses of reported cases of diseases dangerous to the public health.

A circular, giving general rules for the prevention of diphtheria, scarlet fever, and small-pox, was adopted. Forms were adopted for annual reports by health officers and clerks of local boards of health, and by regular correspondents of the Board.

Dr. Avery, of Greenville, was requested to visit the overflowed district along the Maple River, in Gratiot county, and report to the Board.

Dr. Lyster, of Detroit, read a paper on "Syphilis in its relations to the public health." It dealt with the facts of the frequent communication of the contagium of syphilis, by direct and by indirect means, to innocent persons; also with the serious effects on individuals, and on the offspring of marriages where one of the parents is thus blighted. He believed much might be done toward preventing this loathsome disease, by wise legislation which shall restrict syphilis, and especially by collecting and disseminating among young men and other people, facts relating to the nature and dangers of this disease.

Dr. Kellogg read a paper on the "Relations of Preventable Sickness to Taxation," showing by the reports of the board of correction and charities, the abstracts of reports of county superintendents of the poor, the abstracts of statistical information relating to the insane and the deaf, dumb, and blind, and the Vital Statistics reports, that more than 3,000 persons in Michigan are annually dependent on the State for support to a greater or less extent, in consequence of diseases preventable by the adoption of proper sanitary measures. The cost to the people of the State for the support of these persons is over \$40,000 annually, a portion of which is paid by every tax-payer. This is but a small part of the actual loss to the State. The number of deaths from preventable sickness in 1880 (*estimated* from returns by supervisors and assessors) was 4,585. Placing the value to the State of each human being at the low estimate of \$1,000, the aggregate loss by deaths from preventable sickness is over \$4,500,000. But to this must be added a further loss from sickness which did not terminate fatally. The statistics of the benefit societies of England show that, for every person who dies, two persons (on the average) are sick throughout the year. This indicates a total annual loss of time from preventable illness on the part of more than 9,000 persons, to which should be added the expense of living, etc., certainly more than \$1,000,000. This gives about \$5,666,000 as the total loss to this State from diseases generally conceded to be preventable. These figures are regarded as much too small, because of the few diseases included in this estimate as preventable (though it is generally conceded by sanitarians that at least nine-tenths of all ailments may readily be prevented), and because only sickness and

deaths directly traceable to preventable causes have been included, while a large amount of sickness and many deaths are indirectly due to these causes. It is probable that preventable sickness might justly be charged with an expense to the State of not less than ten million dollars. Estimating the loss in other States in the same ratio to the population, the aggregate loss to the whole United States is not less than three hundred million dollars annually, an amount which would pay the national debt in six years.

Mr. Parker, of Flint, presented a report of the Public Health Section of the American Social Science Association at Saratoga.

The committee on sanitary survey of the State was requested to prepare schedules for the sanitary survey of cities, villages, and townships.

Mr. Parker reported a proposed bill, authorizing all boards of education to exclude from school, persons infected with diphtheria, scarlet fever, or small-pox, or living at houses where any person is infected with one of these diseases.

The Secretary was directed to prepare and issue a weekly bulletin of sickness in Michigan, for such papers and medical journals as will publish it.

Dr. Baker was authorized to procure the services of an architect, in the preparation of a circular on hospitals for communicable diseases.

Dr. Kellogg reported on the subject of criminal abortion. He and Dr. Hazlewood were requested to prepare a circular, designed to collect facts on this subject.

TORONTO MEDICAL SOCIETY.

October 6th. The Society met at 8 o'clock, the president in the chair. The minutes of the last meeting were read and confirmed, and Dr. Robinson proposed as a member of the Society.

Dr. Oldright presented the foetus and placenta taken from a patient supposed to have miscarried about the fifth month. The foetus was of very small size, and the placenta had undergone fatty degeneration; the smallness of the foetus was thought to be due to the fatty condition of the placenta. The amnion was adherent to the body of the foetus. The same gentleman also showed a placenta taken from a case of premature birth, at the seventh month. There had been considerable hæmorrhage prior to the birth of the child, and the placenta presented

on its uterine surface two large clots, which appeared to have been formed at different times. The child was still-born and presented the condition of rigor mortis; the cause of the separation of the placenta could not be accounted for.

Dr. Burns then related a case of "Pruritus Hæmialis," as described by Dühring. It is a neurosis and attacks principally the arms and thighs, and is a disease of cold weather, hence its name. The treatment is by glycerine, vaseline, and the Turkish bath.—The Society adjourned.

October 27th. The Society met at 8.15 p.m., the president in the chair. The minutes of the last meeting were read and confirmed, after which Dr. Robinson was elected a member of the Society.

Dr. J. S. King showed a pessary which had remained in the vagina for four years. It was bound down on the right side of the uterus by a fibrous band about three-quarters of an inch in width. The pessary was divided and removed.

Dr. Workman mentioned a case of acute mania, occurring in a patient who had an incrustated pessary in her vagina.

Dr. Cameron exhibited a case of "Paralysis Agitans," affecting the right upper and lower extremities, in a patient æt. 67; the trembling was of three years' duration, and increased upon excitement or voluntary motion. In reply to a question, Dr. Cameron thought that there was no definite or constant pathological change in this disease, but that it was a functional disorder.

Dr. McPhedran then showed a case of albuminuria and dropsy in a boy æt. 18; the disease was of eight weeks' duration. The patient when examined at the Society, presented the following conditions: anæmic and generally œdematous; the abdomen enlarged, partly due to ascites and partly to tympanitis; apex beat of heart under left nipple; splenic enlargement, and slight enlargement of some of the lymphatic glands; urine contained granular and epithelial casts, and the voice was lost beyond a whisper.

Dr. Graham, after describing the hæmacytometer, examined the blood of the patient under consideration, which showed no increase in the white corpuscles, but a diminution in the red ones. Dr. Reeve examined the eyes, and found receding slight optic neuritis and a small hæmorrhage.

The Society adjourned.

Selected Articles.

CLINIC ON INTRA-THORACIC TUMOR, EMPYEMA, AND BILIARY CALCULI.

FRANCIS DELAFIELD, M.D., N. Y.

GENTLEMEN,—You hear this young man's history—that he is 21 years old, and that for the past 13 or 14 months he has been complaining of pain in the head of a peculiar character. This pain comes on after exertion and after stooping, and he refers it to the frontal region; it is dull and throbbing in character, and is accompanied by a feeling of unnatural fulness in the head and face. It continues for about half an hour, after which time, if he keeps quiet, it disappears. He also complains occasionally of a pain in the left side which is excited by coughing, but which is not severe. He complains, too, of dyspnoea on exertion, and of difficulty in swallowing. He says his face is constantly fuller than it used to be, but he has not observed any particular change in it from month to month. His appetite is good; he seems to be well nourished; he has had no œdema of the feet or of the legs; he sleeps well at night. His main symptoms seem to be his cerebral condition.

You notice that even the little exertion he makes in taking off his shirt changes the color of his face; the color is more livid, the lips are darker, the whole face is suffused and a little swollen from that slight exercise, and as I stand near him I can see that he breathes with a little more difficulty than he did. There is, too, a fulness of the neck, and the veins of the neck are more prominent than they should be. The upper part of his chest and the arms are larger and out of proportion to the rest of the thorax.

You notice that there is a well marked difference between the percussion note on the right and left sides of the chest; there is on the right greater dulness than on the left side, and this dulness extends from the clavicle all the way down until it becomes continuous with the liver dulness. This dulness also exists behind the upper part of the sternum. On the left side the resonance remains fair. The breathing is peculiar over both lungs; it is not like the breathing of people in general; it is louder, and the quality is changed. It is that kind of breathing which exists when something presses upon the trachea or a bronchus—a hard, rude respiration. The voice is a little louder on the left side than on the right. Such are the physical signs in front. The heart sounds are normal. There is a little dulness over the upper part of the right lung behind, as compared with the left, but over the lower part the resonance is good enough. There are also creakings of pleural adhesions over the right lung behind, and to a less extent on the

left side. The voice sound is louder than it should be over both lungs, especially over the upper part, and it is changed in quality, being somewhat of a bronchial character.

Now, what is the matter with this man? "Aneurism." Well, aneurism, of course, would be capable of producing the interference with the venous circulation; it would be capable of causing the difficulty in swallowing; it would be capable of causing the dyspnoea; but it would have to be an aneurism of very large size to give us the diffuse dulness which we have over the whole of the right side of the chest in front, and over the sternum. It is not a circumscribed dulness, but it is a dulness involving the whole of the anterior portion of the right side. So that, although aneurism is quite a proper thing to think of in this case, I think we will have to look farther than that.

"Enlarged bronchial glands." That again would be possible, but when you say enlarged bronchial glands you would have to mean something more than that in order to cover the large sized tumor which is evidently there. There is a form of tumor which begins in the glands, and it may begin in the bronchial glands, which is called lymphadenoma or lymphoma, and which grows to considerable size; but, although it originates in the glands, it does not remain confined to the glands; it grows like a new growth, and infiltrates all the surrounding tissues, and thus forms a tumor of considerable size. In a person of this young man's age, without enlarged glands anywhere else in the body, we would hardly expect to find a simple enlargement of the bronchial glands to form a tumor of so great a size as evidently exists in his thorax. "Pleurisy with adhesions." No; pleurisy with adhesions would not give us the pressure signs which we have here—pressure upon the descending vena cava, upon the œsophagus, and upon the trachea. There can be no question, I think, that there is a tumor in the right side of his thorax; a tumor of considerable size, which began about the centre and then extended upward and downward. The tumor not only gives us dulness in this region, but it also presses upon the œsophagus, upon the trachea, and upon the vena cava, so that it is evidently a tumor beginning about the centre of the thorax to the right side, and the question simply is, what is the character of this tumor? I should think it pretty evident that it is one of two things: a tumor starting in the bronchial glands, or in the pleura. Most of the solid new growths which we find in the thoracic cavity seem to originate in either the lymphatic glands, or in the serous membranes, usually the pleura. The tumors which start in the bronchial glands are usually composed of a structure like that of the original gland; they are made up of a connective tissue stroma, containing cells like the cells of the normal lymphatic gland. But they do not grow like a simple benign new growth; there is

first an enlargement of the glands, and then a diffuse infiltration, the new growth extending to, and infiltrating, all the surrounding soft parts, and in that way tumors of very considerable size are sometimes formed. The disease may begin in the thorax and extend to parts around the trachea, so that it may make its appearance in the neck as tumors of considerable size, and indeed the tumors sometimes begin in the neck at the same time that they make their appearance in the thorax, thus developing from the beginning in both the region of the neck and thorax.

The tumors that grow from the pleura have a much more difficult anatomy to analyze. They resemble in their anatomy a good deal the tumors which grow behind the peritoneum; they are difficult to classify. We hardly know, sometimes, whether to put them with the class of carcinoma or with the class of sarcoma. They also reach a considerable size; they may fill up nearly the whole of one side of the thorax. I think it probable, judging from the position of the tumor in this man's case, and from the earliness of the symptoms of pressure upon the vena cava, that the tumor probably did have its origin in the bronchial glands, and has been gradually extending from them ever since.

[Patient sent out]. The prognosis is such a case is altogether bad. The man will evidently die from the disease, but we cannot tell how soon death will take place. In some cases the tumor grows pretty rapidly, and the patient dies within a moderate length of time; in other cases the tumor grows very slowly; the adjacent viscera seem to accommodate themselves to the presence of the tumor to some extent, and it is astonishing how long such patients will continue to live. In the case of this young man it has gone 13 or 14 months, he tells us, and apparently he is not very much worse off now than he was several months ago, so that it is possible for him to continue to live for months, and even years. That will depend partly upon how rapidly the tumor grows, and partly upon how rapidly the pressure symptoms develop. Some of these patients die more especially from pressure upon the trachea; the dyspnoea becomes more and more intense; they have dyspnoea not only on exertion, but they begin to have spasmodic attacks of dyspnoea; an inflammatory process is set up in the trachea which extends to the bronchi, and to the lungs, and they get up a broncho-pneumonia from which they may die. In other cases they die apparently simply from the extreme dyspnoea. In other cases pressure upon the oesophagus may interfere with nutrition, and possibly finally lead to death by exhaustion or starvation. I remember of one such patient dying from strangulation by the lodgment, I think, of a piece of bread in the larynx. He could not swallow it, and died suddenly from that cause.

EMPHYEMA.

This boy, about four years old, was sent here, with an account of his case, by his physician. The physician states that in January, 1879, the child was attacked with pleuro-pneumonia, which went on to become chronic. His physician first saw him in June of that year, when he was still suffering from the physical and rational signs of pneumonia on the left side. It got better, the boy disappeared from his observation until May, 1880. During this time he had been cyanotic; had had dyspnoea; had had fever, sweating and chills. He was aspirated three or four times in June, 1880, and pus was drawn off. In July a free opening was made, but it was difficult to keep it open. In September a counter opening was made in front, and a soft rubber drainage tube was inserted in front and behind, and the pleural cavity freely washed out by the mother with a weak carbolic acid solution. By December, 1880, the child was apparently perfectly well.

We will see, then, what condition his chest is in now. The boy is a pretty stout little fellow now, you observe. The left side is a little smaller than the right, though not much; the chest is pretty nearly symmetrical. The resonance is not quite so good on the left side as on the right; still, there is a fair amount of the pulmonary quality. There is a little dulness; the breathing is also good over the left side, although it is not quite so loud as on the right side. The heart is in its natural position. That, then, is an exceedingly satisfactory termination of a case of empyema, and it shows us what we have occasion quite often to observe, how much less severe a disease empyema is in young children than in adults. Such a recovery from empyema in the adult is a thing we very seldom can hope for, and very seldom get; but in children the prognosis is altogether different. A child may be very sick from empyema, and yet after the pus is removed thoroughly the prognosis is quite good; not only will the fluid be removed from the pleural cavity, and the pleurisy cease, but the lung will expand, and there may, as in this child's case, be no deformity; there may be no retraction of the chest wall. I see no reason why the left side should not, as the child grows up, become as fully expanded as the right, and there remain no apparent deformity except the scars resulting from the operation, to indicate that the child ever had empyema.

BILIARY CALCULI.

This man, gentlemen, says that about two years ago he was taken with a colicky pain about the stomach; that it went away and returned again after six months; and that during the past eight months he has had some pain nearly all the time. The first attack lasted about an hour; the second attack perhaps a shorter time; and during the past eight months he has had pain from time to time, all the

the time, the intervals being sometimes a week or more, and more lately he has had some pain every day. He says he has a sort of premonition of it before it comes on; a dull, heavy feeling, which gradually grows worse, and extends around from the stomach to the back. When the attack of pain is unusually severe he cannot catch his breath, cannot breathe easily. He says that sometimes when these attacks come on he feels sick at the stomach, and vomits some bile, and is then relieved. When I asked him whether he lost flesh and strength, he replies that he dieted himself for a while, hoping thus to relieve himself of this pain, but it did not, and he went back to hearty meals again; and while dieting himself he lost some in flesh. Aside from that it has not seemed to affect his general condition particularly. His business is that of a book-seller, and he has been able to attend to it until the past three weeks. Neither he nor his friends it seems have noticed any yellowness of the skin or conjunctiva. His bowels are regular, and so far as he knows his stools present a natural appearance. He has no difficulty in passing his water, and it presents a normal appearance. The only difficulty, then, of which he complains, is this pain, which has existed for some time, and which seems to interfere a good deal with his comfort.

The contour of the abdomen, you will notice, is normal, and physical examination is negative. The only point which I do not feel sure about in his history is, whether he has or not really been jaundiced. It is very difficult, sometimes, to be sure on that point, for slight degrees of jaundice very often escape observation.

The question, then is, what is the cause of the pain which he has had? Pain of this kind, and occurring in this way, and without any more symptoms than this man has given, is usually to be referred to the biliary passages; we usually suppose that it is due to the passage of biliary calculi, it is not always easy to understand what is the relation between the passage of the biliary calculi and the pain. If each attack of pain were due to the passage of a calculus through the whole length of the bile duct into the duodenum, we should expect that it would be attended by obstructive jaundice, but in many of these cases we find that this is not so; that either there is no jaundice at all, or that the jaundice is very slight, and occurs only in some attacks and not in others. We have, therefore, to suppose either that the calculi are small or that they pass through the duct without any great difficulty into the duodenum, although they do produce pain. Another supposition which we can make is, that there are a number of calculi in the gall bladder, and that from time to time one of these calculi engages in the cystic duct, does not pass through into the common duct, but falls back again into the gall bladder. This of course would be capable

of producing pain without producing jaundice. It is quite common in these cases for the pain to be relieved by vomiting, as in this man's case. Many patients suffer much more severe pain than this man seems to suffer, or at any rate they make more fuss about it; and you can frequently relieve them of a given attack of pain by giving them some simple emetic which shall at once produce vomiting. It seems probable that the muscular effort which is made in vomiting causes the calculus to fall back from its lodgment in the duct into the gall bladder, and thus pain is relieved. We have to admit however, that our knowledge on this point is quite uncertain. It is very seldom that we have an opportunity to make an autopsy on persons troubled with this affection, for the rule is that they recover, and that they recover altogether after a longer or shorter time. Occasionally, however, a person suffering in this way dies from some other disease, and an autopsy is made. I have seen but two, and in both of these there was no change in the gall ducts, but there were a number of calculi of different sizes in the gall bladder. This would make it probable that the pain in these cases is caused by a calculus becoming engaged in the duct, and on falling back into the bladder relief is experienced.

In the treatment of these cases, two objects must be kept in view: in the first place, to stop the attacks of pain when they occur; to render their duration as short as possible; and, in the second place, to try to get rid of the attacks altogether. The induction of vomiting has always appeared to me to be the promptest and easiest way to get rid of a given attack of pain, especially if the patient, as is often the case, vomit easily, without great effort. The simpler the emetic that will produce the effect, the better. In some cases simply a tumblerful of hot water will do; in other cases vomiting can be excited simply by passing the finger down the pharynx: in others you can use mustard and warm water, and so on.

Then, with a view to getting rid of the attacks of pain, I do not know that we can do any better than to put the patients upon the persistent use of soda, or some alkali, which they should take in considerable quantities, and for a considerable length of time.—*Nashville Jour. of Med.*, Oct., '81.

CASES IN HOSPITAL PRACTICE.

A CLINIC BY AUSTIN FLINT, M.D.

Emphysema.

This patient's name is Thomas S., he is sixty-three years of age; pursues the business of peddling; was admitted on the eighth of this month. Please note this fact, gentlemen, that he has had more

or less cough since his childhood. About eighteen months ago he became much worse. Suffering for want of breath, and this difficulty has been increasing steadily, he is now unable to take any kind of active exercise without suffering from marked dyspnoea. The cough has been violent and paroxysmal. The paroxysms of coughing are accompanied with congestion of the face, and frothy sputa. The appetite is poor, and he has lost a good deal in weight. He complains, then, of cough, dyspnoea, loss of appetite, and impairment of strength.

Well, here, gentlemen, are good data for forming a presumptive opinion, but, if I ever lead you to do that, it is simply for a kind of discipline, for it is not a good plan to pursue in the examination of patients. We should try to avoid forming any definite opinion in diagnosis until we get all the facts. But here the history is quite a characteristic one, and the diagnosis will not be difficult.

This is a case I have been looking for for some time. It is the first we have had this session. I call your attention to the appearance of the chest. Writers are accustomed to speak of the barrel-shaped chest. It is not a bad simile. You see at once what you have here, a projection of the anterior wall of the chest, which is not natural. We do not find it unless we meet with a case where pulmonary emphysema began early in life and continued.

I call your attention next to the manner of breathing. In the first place, you see that, while lying perfectly quiet, as he is now, there is labor in breathing. He does not breathe easily, comfortably. Then observe that the upper part of the chest remains quiet while he breathes, that what movement does take place takes place at the lower part of the chest and at the epigastrium. During inspiration the lower part of the chest is drawn inward, just the reverse of what should occur. You see, when he takes a deep inspiration, the chest wall is lifted up like the shell of a tortoise, as it were one solid bony case, and the epigastrium is drawn in. These are characteristic visible signs of emphysema, with sufficient dilatation of the lungs to cause this deformity of the chest. Should he have a fit of coughing before leaving the amphitheatre, you will see that it is spasmodic, as stated in the history; one cough succeeding another too rapidly for full inspiration, so that the patient gets out of breath and suffers very much from dyspnoea, the face and neck becoming congested and swollen, and the proiopia not unfrequently becoming cyanosed. With the spasmodic paroxysms of coughing there is usually expectoration, which contains perhaps some mucus, but a good deal of serosity. This serosity contains air bubbles in abundance, so that it looks like soap-suds.

I will not dwell long on the signs obtained by percussion and auscultation, as we have considered them before. They can be obtained in cases where there is not as much deformity of the chest as exists here. You observe that his chest is dilated beyond the utmost limits of forced inspiration in health. That is an important fact as bearing on the mechanism of emphysema. It shows conclusively that in the production of emphysema, such as we have here, something more is required than the collapse of certain pulmonary lobules and the expansion of others to fill the space.

Pulmonary resonance is increased, vesiculo-tympanic and higher in pitch, especially as we ascend. The tympanic quality and pitch is a little more marked on the right, showing that here is an illustration of the rule that the upper lobe of the left lung becomes emphysematous to a greater degree than that of the right. A reason for this may be that in violent fits of coughing and strains upon the lungs from his labor, the left upper lobe is more compressed than the right in violent inspiratory acts, because the liver prevents so great force being exerted upon the right lobe by the inward movement at the lower part of the chest and at the epigastrium. There is feeble respiratory murmur on both sides, marked on the left side, because there is more emphysema. There is short inspiration and prolonged expiration, but this prolonged expiratory sound has the same quality and pitch as the expiratory sound of health. Please bear in mind, viz., that although there is prolonged expiration it does not differ in pitch and quality from that in health, and do not examine for bronchial or broncho-vesicular expiration, for where these exist there is a rise in pitch, and a tubular quality.

The heart is pushed below its normal position, on account of the increased volume of the lung at the left upper lobe.

Now, this patient has no oedema. When oedema occurs it is dependent upon the effect of the emphysema on the right side of the heart. Emphysema involves an obstacle in the pulmonary circulation; that obstacle leads to an over-filling of the right side of the heart; that leads to increased power of the right ventricle; that leads to hypertrophic enlargement of the right side; and that leads ultimately to dilatation. Then we have an obstacle affecting the systemic circulation, and the result of that is general dropsy, together with more or less cyanosis. Now, you see this patient's lips are of pretty good color, just a little dark, and he has no oedema. The history does not show that he has had asthma. It is a case of chronic bronchitis occurring early in life, persisting, and leading to emphysema which, in the great number of years that have expired, has reached the degree which you see here. If there were enough chronic bronchitis to lead to phthisis, in a case like

this, it is difficult to answer why we do not have it, and yet we know that this condition antagonizes the occurrence of phthisis.

What is to be done in a case like this? What is the objective point of treatment? It is to diminish, if we can, the bronchitis; to improve his condition as respects that, as far as we can. This distention of the chest will never disappear; but if we can relieve the bronchitis, it will not be likely to increase, and it may diminish somewhat, perhaps, even considerably. We should, therefore, aside from certain palliative measures, employ remedies which are found by experience to exert a sanitary effect upon chronic bronchitis, as the iodide of potassium, the chloride of ammonium, the chloride of potassium, the balsamic remedies. It is possible a good deal of good may be effected by their use in this case.

Typhoid Fever.

CASE 2.—The next case, gentlemen, is one of a good deal of interest. I hardly know how to manage it, because the record is so long. You will see why it is so, and why it is very desirable it should be so. The temperature has been taken hourly for several days, and it makes a great many details. But I will try to get the meat out of the nut. It is a case of typhoid fever which has been treated pretty vigorously with the wet sheet, and then with quinine.

The patient is a girl about fifteen years of age, and is now getting along very satisfactorily. She still presents some, but not so much as she did, of that dull, indifferent expression, which is strikingly marked in most cases of this fever.

Now, let us see what we can get out of the history, so far as regards the practical points. Bridget C., fifteen years of age, admitted on the fifth instant. A week before her admission she was taken ill. The first thing of which she complained was headache, and that was followed by a feeling of lassitude, loss of appetite, and vague pains.

On her admission, which was a week afterward, she complained of having pains all over, a general feeling of malaise, headache, weariness, loss of appetite, etc. She had no epistaxis or diarrhoea—an absence of two symptoms which are very frequently present, and which, therefore, possess diagnostic significance. But we have no difficulty in reaching the diagnosis in the absence of these. The face was flushed, the eyes suffused, the tongue coated white, red lips, sordes on the teeth, some pharyngitis. The patient's mother was admitted on the same day, in about the same condition.

On physical examination, there was right iliac tenderness and gurgling, but no tympanitis. Three rose colored lenticular spots were found on the

abdomen. Subsequently some more were found. The spleen was slightly enlarged.

Now we come to the temperature and treatment. On the fifth, which was the day of her admission, the temperature at 11 o'clock was 101.5°. She was ordered whisky, half an ounce every three hours, and a diet of milk and eggs. At 4 o'clock the temperature was 104.5°; at 4.45, 104.5°. Now she was placed in a wet sheet. By the wet sheet we mean enveloping the whole body in a sheet saturated with water at about a temperature of 80° F., first placing under the patient an India-rubber cloth, so as to protect the bed. Then the wet sheet, in which the patient is wrapped up, sprinkled about every fifteen minutes with water, of about the same temperature. Now, that is applied as a substitute for the cold bath, and I believe it to be such. You see at once it is more easily managed, and is much more convenient and comfortable for the patient. Taking him out of bed and putting him into a bath in the condition in which he is, is very apt to excite a good deal of mental and nervous disturbance. Moreover, it is attended with a good deal of trouble. In this way, however, the wet sheet can be continued as long as desirable without any trouble.

At 4.45 the temperature was 104.5°, and the patient was put in the wet sheet. At 5 the temperature was 104°; at 6, 104.25°; at 7, 103.75°; at 8, 104.75°; at 9, 101.75°; and then the sheet was removed. She was in it from 4.45 to 9, the temperature having been reduced from 104.5° to 101.75°. At 11 p.m. the temperature had risen to 105.5° in the axilla. The difference between the temperature of the mouth and the axilla is from a half to a whole degree. She was again placed in the wet sheet. At 12, midnight, the temperature was 104.5; at 1 a.m., 104.75; at 5, 104°; at 6, 104.75°; and so on until two o'clock, the wet sheet being continued steadily until that time of the afternoon of the next day, when the temperature had fallen to 103.5°. This mode of employing water can be continued much longer than the bath. At 3 o'clock the temperature again rose to 105.25°. It was then thought best to give her a full dose of quinine as an antipyretic. She was given twenty grains at 3. At 4 p.m. the temperature was 105.75°, and she was again placed in the wet sheet. The sheet was removed at midnight, the temperature having fallen only to 104°. So both measures, the quinine and the wet sheet, failed to reduce her temperature much. She was delirious, and this, you know, belongs to the disease. From 1 o'clock a.m. to 8, on the 7th, the temperature varied from 104° to 106°. The tongue was uniformly red and very dry, and she fretted a good deal about being placed in the wet sheet. She took nourishment well, and her general condition seemed to be good. During this entire day the wet sheet was not used, but at 1

p.m. she got ten grains of quinia. She had this day a loose yellow colored stool, such as belongs to the disease. The temperature kept up all day; at 6 p.m. it was 104.25° . The pulse was only 84, illustrating what we see often enough, that although not infrequently the temperature and pulse correspond, often there is a marked discrepancy. Here was a pulse of only 84 while the temperature was varying from 104.5° to 106° . Nothing was done except to give the dose of quinia, having been a little discouraged in not getting the effect hoped for from the wet sheet. One reason why it was not applied was, that the patient shrunk from it; was uncomfortable; fretted; cried. As a substitute for it, it was ordered at 6 o'clock in the evening that the body be sponged. Now, we can effect a good deal by sponging the body, if it only be continued and thoroughly carried out, either having the whole body exposed and sponged, or sponging a portion of the body at a time, doing so not for a few minutes only, but for many hours, perhaps. Well, this was commenced at six o'clock, sponging first one extremity, then the other, then the body, and so on, with tepid water. Twenty grains of quinia were ordered to be given every six hours, the first being given at 6 o'clock, the temperature then being 104° . At 9, it was 103.5° ; at 10, 103.25 ; and so it went until 2 a.m., of the 8th, when it rose to 104° , and continued so until 7 p.m. when it fell to 103.75° ; but at 12 m. she had received twenty grains of quinia, and the same amount at 6 p.m. At 8 p.m. the temperature was 103° ; at 9, 104° ; at 10, 101.75° . The patient was annoyed by the sponging. She had a slight cough, but no expectoration; the pulse was 96, and rather feeble; the carbonate of ammonia was now given, five grains every three hours. The sponging was continued pretty constantly for a couple of days now, although the temperature did not go up very high. On the 9th it went up as high as 104° , but only once, and continued so only an hour. The rest of the time it varied from 100° to 103° , being kept down, as we have reason to think, by the sponging. Now we come to the 11th. This day, at 1 a.m., the temperature was 100° ; at 9 a.m., 100.75° in the axilla; at 10, 100° ; at 11, 100° . Now, you see, she has almost a normal temperature. There is no diarrhoea, there is no tympanitis, the mental condition is improved, and she is apparently approaching convalescence.

She had epistaxis after coming into the hospital. Interesting points in the case are, the occurrence of the fever without epistaxis or diarrhoea during the forming stage, and with no marked diarrhoea during the progress of the disease; still, some of the stools have been liquid, and of the characteristic yellow color; then a higher temperature and not a proportionate increase in frequency of the pulse. Had we formed an idea of the height of

the fever in this case by the pulse we should have made a mistake. We will see yet whether she goes on to perfect convalescence and recovery.

(Later. The patient completely recovered.)

Bright's Disease.

CASE 3.—Our next patient's name is M., 19 years of age, a seamstress, admitted the 27th ult. She began to cough about five months ago. Two months subsequently, while walking along the street, she slipped and fell, striking on her left side, and immediately began to raise blood. The quantity was small. For two weeks after the fall her sputa was stained with blood. She did not experience any embarrassment of respiration after the fall, but had pain and soreness in the right side. Since the cough began she has had occasional night sweats. She has lost in weight, her appetite is impaired. She entered the hospital complaining of cough, diminished appetite and strength, and night sweats. The physical examination showed prolonged high-pitched expiration, the voice sounds more distinctly transmitted at the left apex, and, on physical examination yesterday, I found vocal resonance distinctly increased at the left summit, and râles present there occasionally, so that it appears to be clear enough that this patient has a small phthisical affection situated at the upper part of the left lobe.

But I have brought the patient before you for another reason. She was given cod liver oil and hydrocyanic acid. On the 30th ult. it was noted that she had night sweats, and that the hands and feet showed some œdema—not much. On the 3rd inst. the patient was seized with a chill, followed by pain in the left side near the nipple. She had cough and orthopnoea; was suddenly seized with such difficulty of breathing that she was obliged to sit up in bed. The next day she had orthopnoea and pain in the side, and a cough, with a pinkish watery expectoration. The temperature was 101° , the pulse 120, the respirations 24. Examination showed œdema of the hands and lower extremities, and over both lungs posteriorly diminished fremitus, dulness on percussion, diminished vocal murmur, subcrepitant râles—a group of signs which clearly evinced pulmonary œdema.

What pathological connection should we suspect under those circumstances? There was no disease of the heart. We should, therefore, at once direct our attention to the kidneys, and, on examining the urine, it was found to be pale, clear, acid, of a specific gravity of 1.017, to contain traces of albumen, and small hyaline, fatty, and granular casts.

You can see, gentlemen, no appreciable œdema under her eyes to-day, and there is none of the feet, and the œdema of the lung has completely passed away. Indeed, that more or less of it,

passed away the day after its appearance. You observe, she presents no particularly morbid aspect. The point is this, gentlemen: this patient has disease of the kidneys (she has phthisis too), and yet, although œdema of the lungs and a little of the limbs and face was noticed, there was nothing to suggest the idea that she was suffering from renal disease.

Now, let us see what further facts can be obtained with regard to the urine. On the 4th inst. the amount of urine passed in the twenty-four hours was seventy-eight ounces; on the 5th, seventy-nine; on the 6th, forty; on the 7th, thirty-eight; on the 8th, thirty-six; on the 9th, thirty-six; on the 10th, twelve ounces. Some perhaps was lost. The temperature has been normal several days. She complains of pain in the left side. She was placed upon a diuretic.

From this history what form of chronic disease of the kidney has she? I do not suppose any of you will hesitate much in answering that question. "The cirrhotic or contracted kidney." Yes, of the different forms of chronic disease of the kidneys, so far as we can judge from the symptoms, she has the contracted kidney. This is shown by the absence of œdema, except in a small degree, a very small quantity of albumen, the presence of casts, urine of rather low specific gravity and large in quantity, and the occurrence of pulmonary œdema.

The practical lesson that I would impress by this case is, examination of the urine whenever we investigate it with reference to renal disease. Suppose we had examined the urine in this case only with reference to albumen, we would have said, here is only a small trace of albumen, which perhaps is due to some transient cause. This shows the importance of a microscopical examination. And here we have pulmonary œdema, whether it depend upon uræmia or not, we are not prepared to say; but in a case like this it is important to form an idea as to the amount of urea being eliminated, and it should be examined with reference to that fact. I see patients in consultation, and often, on asking if the urine has been examined, I am told it has been, that it contains albumen, but that is about all they know about it; sometimes they don't even examine for the specific gravity. The specific gravity and the quantity are the points. These give us the data by which we can judge whether the urea is eliminated in sufficient quantity to relieve the patient from the danger of uræmia. I have not time to dwell upon this subject longer to-day, but you will recall the minor manifestation of uræmia as well as the graver. In this case the indications are to eliminate the urine in larger quantity than it is being passed at present, and to guard against another attack of pulmonary œdema, and further manifestations of renal disease.

Pneumonia.

CASE 4.—This patient's name is Alexandra M., forty-five years of age, a domestic, a native of Canada, admitted on the 8th ult., having been ill two weeks. Her illness began with pain in the left side, with cough, no chill. On admission, she complained of cough, of dyspnoea, of pain in the left side, and of debility. The temperature was 101 in the morning, and 100 in the evening. On physical examination, there was found increased vocal fremitus, dullness, bronchial breathing, bronchophony, sub-crepitant and crepitant rales over the lower lobe of the left lung. Well, of course, we could say it was a case of pneumonia. The general condition of the patient was very good, and we did not have a chill in the previous history, but still we have the signs of consolidation affecting the lower lobe, and some of the members of the clinical class will recollect that this is the patient who gave us a good illustration of bronchial respiration and bronchophony, bronchophonic whisper. Well, her general condition was good, and it remained good, and she felt well enough to sit up. She was allowed to sit up, but still there were those signs. She came in on the 8th ult. There being very little increase of temperature, and the signs mentioned continued two or three weeks, and I illustrated to different sections of the clinical class those physical signs by this patient. Well, we began to say then, this cannot be pneumonia; it must be fibroid phthisis. And we rather settled down on that conclusion. Last Friday, a week ago to-day, I took a section around to illustrate those physical signs in this patient, and to my surprise they had disappeared. She had not been examined for several days, and the signs of consolidation had in the meantime disappeared.

Now, what is the lesson? It is this. That in some cases of pneumonia (for no doubt it was a case of pneumonia) the consolidation of the lung continues, and leads us to think there is phthisis, but finally resolution takes place. So you will meet with cases where you will think there is pneumonia, and you will find several weeks elapse before resolution takes place. But resolution will at length take place. I shall never forget a patient who came into the hospital some years ago with consolidation at the upper lobe of one lung, and who was supposed to have phthisis. He remained in the hospital for some time, lying in his bed, attracting little attention, as he was supposed to have phthisis, until one day I was struck with the fact that he was looking better—very much better than one could expect of a patient with phthisis confined to bed, and on examining him, I found that consolidation had greatly diminished, that resolution was taking place, and that the patient had not phthisis, but pneumonia. He re-

covered, and shortly after enlisted and went into the army.

Hepatic Colic.

CASE 5.—As we are lecturing on hepatic colic in the didactic course I will present you a patient with that affection, but we have not time to make extended remarks upon it. His name is Daniel, colored, a waiter, and he was admitted on the 8th inst. No previous history was obtained except that he had three attacks similar to the one from which he is now suffering. The conjunctivæ show a moderate amount of jaundice. In the three attacks previous to this the prominent symptoms were pain in the right hypochondrium, radiating to the chest and right shoulder, tenderness of the liver, vomiting, and icterus or jaundice. Those are the salient points of the past attacks, and also of the one which he has had since he came into the hospital. The pain was paroxysmal, the paroxysms lasting an hour or more, as a rule, and occurring several times in the course of a week. The present attack began on the 8th inst., and was characterized by pain over the liver, which radiated into the thorax and into the right shoulder, tenderness in the right hypochondrium, icterus, constipation, anorexia, emesis, and some febrile movement. Several paroxysms have occurred since his admission into the hospital, and during the intervals the right hypochondrium has been the seat of continuous dull pain and tenderness.—*Med. and Surg. Reporter.*

INTRA-CAPSULAR FRACTURES.

Dr. Maxwell (Illinois State Md. Society) gives the following on the above subject, together with the history of two cases in which his method of treatment was successful :—

The treatment of intra-capsular fractures has enjoyed the attention of the best minds in this country. In this paper I intend to summarize the teachings of modern surgery and suggest some additions to the treatment. Intra-capsular fractures are those involving the neck of the femur, entirely inside of the capsule of the joint. They are peculiar to advanced age and to females. They are remarkable on account of the small amount of force necessary to produce them, and for the extreme difficulty in obtaining union by bone. As age advances, remarkable changes take place in the shape and size of the neck of the femur. It joins the shaft more nearly at a right angle, diminishes in size and becomes more fragile. The possibility of bony union in these fractures has been discussed with no little warmth. Astley Cooper's and Frank Hamilton's researches show that, though possible in some instances, it is so rare as not to invalidate the truth of the assertion that there generally is

non-union. Union does not take place for the reasons :

1. There is a deficient vascularity in the bones, due to their relative positions and deficiency of the artery passing through the ligamentum teres.

2. Whatever reparative material is developed has no local permanence, there being no support or nidus for it.

3. This material becomes so diluted with increased secretion of synovial fluid, as to be incapable of making any progress.

4. Imperfect coaptation and the impossibility of keeping the parts quiet.

These causes combined with the action of the powerful muscles at the site of fracture, constitute the chief reasons for non-union.

The treatment has been the subject of difference of opinion. Erichsen advocates a similar plan to Agnew's. The failure on the part of surgery to have means to coaptate the ends of the fractured bones is enough to account for the failure of many fractures to unite. If surgery proposed no better methods of treating fractures of long bones than those for intra-capsular fractures, there would be, no doubt, as much non-union in these, and it would be said that the bones are degenerated, etc. Is there not too great a tendency to saying such things instead of trying to put the bones in good coaptation? Extension must always be used in the direction opposite to the displacing force.

All the forces act on the lower fragment, and the tendencies to displacement are upward and inward. The muscles are strong and numerous and tend to draw the femur upward, shortening the limb and turning the thigh outward, and throw the trochanter behind the acetabulum. There is eversion of the foot, and crepitation can be distinguished when extension is made. The teachings of modern surgery, that extensions be used, is not sufficient.

The following plan, which I offer, is rational and has been successful in two cases in my practice.

Apply extension in two directions in opposition to two forces, longitudinally and laterally. Put adhesive strips along the leg and foot, to hold a cord passing over pulley and attached to weight. Lateral extension is made by a five inch muslin band around the body. A splint is applied to the inner aspect of the thigh. A pulley is placed opposite the crest of the ilium and four inches above it. Counter extension is made by the body; the bed is elevated at the foot, one foot on the fractured side and eight inches on the other. The head post on the injured side is elevated four and a quarter inches. By this method the fragments are brought as nearly correctly into apposition as is possible. The inner surface of the capsular ligament is rendered tense and applies itself to the sides of the neck and holds it.

SURGICAL TREATMENT OF EMPYEMA.

The subject was introduced by Dr. C. Gerhardt, (Würzburg), who first reviewed the opinions of the earlier writers on the subject. Passing to the practical side of the question he expressed the belief that a small empyema might be cured spontaneously by absorption; another favourable termination was by expectoration, after a spontaneous opening into the lung; after two or three weeks of purulent expectoration, such cases got well. As to operative interference, he found that a single aspiration sometimes resulted in a complete cure; a method which had been found useful consisted in replacing the pus withdrawn by some indifferent or antiseptic fluid, without the admission of air to the chest. He advocated the free opening of the chest under antiseptic precautions; and thought that to wash out the pleura was not free from danger. Very early childhood gave less favourable, the middle period of childhood more favourable, results than adult age.

Dr. Ranke (Munich) thought that in children an empyema comparatively seldom opened into the bronchi; this, he thought was the most favourable termination. He made use of incision, with antiseptic precautions, and under this system found that his patients generally remained about six months in hospital.

Dr. Jacobi, (New York), had seen three cases of empyema in infants, one containing as much as twelve or thirteen ounces, in which recovery had occurred after a single aspiration.

Mr. F. Richardson Cross (Bristol), thought that the early removal of pleuritic effusion was necessary to insure the re-expansion of the lung. He advised an incision in the eighth or ninth intercostal space, with antiseptic precautions, if aspiration failed after two trials. He had recently had three very successful cases treated on this method. One of them was a most unfavourable case, in a girl aged eight, but recovery ensued in seven weeks.

Mr. R. W. Parker (London), said that as the question of treatment must very much depend on the mechanical condition of the chest, it would be well to divide empyemata into two chief classes, viz: 1. As found in children; 2. As found in adults. Whatever method of treatment was adopted, no favourable result could be expected unless the conditions regulating chest-movement assisted. The cavity of the empyema could not be emptied unless the lung could re-expand, or the chest-wall fall in. In children these conditions were present more commonly than in adults; hence the disease in them was less serious. In old people, whose chest-walls were very rigid, empyema was always a serious, often an incurable, disease. He believed that aspiration, two or three times repeated if need be, was the best treatment in childhood, and

ought always to be adopted before other measures were tried. No doubt the next best mode of cure was the expectoration of pus through the lung; but it was hardly safe to postpone treatment until this took place spontaneously, and, unfortunately, there were no mechanical means by which it might be brought on. When aspirations had failed, a free incision into the lowest and most dependent part of the chest, with antiseptic precautions, was called for. In adults he also advocated aspiration; but if the cavity were large he also suggested that filtered and carbolized air should be injected into the pleura; this air helped to replace the fluid, lessened the dragging sensation often felt, and prevented reaccumulation.—*Brit. Med. Journal*.

DIFFERENTIAL DIAGNOSIS OF ABDOMINAL TUMORS.—Dr. Erich of Baltimore, contributes a very instructive paper to the Clinical Society of Maryland, wherein he points out how easy we may make very singular errors of diagnosis in abdominal tumors. He illustrates his views by the narration of several cases, hoping, apparently, to add to the "known sources of error" in arriving at a good diagnosis. In case 1, a first examination per vaginam "revealed an irregular, hard, nodular tumor in the left iliac region somewhat posteriorly," and a diagnosis of probable cancer was ventured. A year and a half after this examination the patient was examined jointly by Dr. Erich and Dr. Chadwick, of Boston, when the conditions noted, had entirely changed. The tumor then noted, had disappeared, "and a firm, round, movable tumor, about the size of an adult head, was found occupying the hypogastric region." Present diagnosis—a fibroid. It was decided to remove the supposed fibroid by laparotomy. Upon making an incision and bringing the tumor in view, an exploratory puncture was made which yielded pure pus. The patient died, and a *post mortem* revealed an abscess. This case teaches that fluctuation cannot always be made out, even when a large amount of fluid is present. "I was compelled to acknowledge an error of omission," says Dr. E., "in not making an exploratory puncture before resorting to laparotomy. I have since then determined never to pronounce an abdominal tumor solid until after aspiration."

Case 2 had been pronounced by an eminent surgeon a solid uterine fibroid. All the conditions so indicated; but true to his determination, an aspirator needle was introduced by Dr. Erich, and to the surprise of himself, as well as others, "a pint of pure pus was withdrawn."

In Case 3 the patient had been sent to Dr. E. by a friend who had made out a "probable diagnosis of ovarian tumor." The examination made by Dr. Erich appeared to exclude pelvic cellulitis

and abscess—the diagnosis of ovarian cyst was therefore provisionally endorsed, and preparations for an operation were made. Preparatory to this, a tonic treatment was set up, and a mercurial purge administered. The purgative produced diarrhoea with profuse and offensive discharges. Fever was established. The tumor was speedily reduced one-half. Aspiration now instituted, removed a quantity of offensive pus and gas. The tumor was evidently a pelvic abscess.

In his concluding observations Dr. Erich remarks: "In view of these difficulties, which have been acknowledged by the best men in the profession as liable to occur to them, I think it advisable to use the aspirator in cases of doubtful abdominal tumor before pronouncing definitely upon its nature.—*Obstetric Gazette*.

RECTAL EXPLORATION AND DIAGNOSIS. — Dr. Charles B. Kelsey, of New York, contributes an article to the *New York Medical Journal and Obstetrical Review* for October, 1881, which contains several valuable suggestions and the description of some methods which are original. After referring to the many errors which arise in this department of surgery from the lack of care and proper examination, he goes on to answer the question of how to make a rectal examination which shall be at the same time thorough and as free from pain as possible. In his own practice he uses an artificial light of his own arrangement and a forehead mirror, which enable him at all times to illuminate the rectum thoroughly, while by the side of the examining table stands an instrument-case fitted with all necessary appliances. In addition to these things he insists strongly on the necessity of having a water-closet communicating with the office, so that injections may be administered and the bowels moved at the time of the examination. In the matter of specula he confines himself almost exclusively to Sims's, finding this the best of all after the sphincter has been stretched, and not finding any that give a fair view of the parts until this has been done. He relies, however, much more upon the finger for a diagnosis than upon any artificial helps, and claims that with it, after the necessary skill has been acquired, the slightest pathological changes may be detected. In the matter of bougies he also has his own preference, and recommends a soft-rubber instrument, similar to that of Wales, only more flexible. For detecting strictures high up in the rectum or in the sigmoid flexure little confidence is to be placed in a bougie of any sort, and the writer relies almost entirely upon manual examination either through the abdominal wall or by passing the hand into the rectal pouch. The latter method he holds to be free from danger and certain in its conclusions.

DRAINAGE OF THE PERICARDIUM. — A case,

probably unique in the annals of paracentesis, has been recorded by Rosenstein, of Leyden. A child, aged ten years, suffering from pericardial effusion, presented such a degree of interference with circulation and respiration, that an aspirator needle was passed into the fourth intercostal space, near the sternum, and 620 cubic centimetres of liquid were withdrawn. Left-sided pleural effusion soon followed, and 1100 cubic centimetres of liquid were evacuated. The cardiac symptoms increased, and necessitated a second puncture of the pericardium; 120 cubic centimetres of purulent liquid were withdrawn. A relapse occurring, a larger opening was made (an inch and a half long; in the fourth intercostal space. The soft parts were divided layer by layer under strict antiseptic precautions. When the pericardial cavity was reached a large quantity of pus escaped. Two drainage tubes were inserted. The operation was followed by an immediate return of the circulation and respiration to normal conditions. An incision into the pleura, however, also became necessary. At the end of four months of treatment the patient left the hospital in good condition. There was no pyrexia or œdema of the skin in the præcordial region to indicate the purulent nature of the effusion.—*The Lancet*.

SULPHUR FOR PIMPLES ON THE FACE. — Dr. Gage Parsons believes that Mr. Erasmus Wilson was the first to propose sulphur lotion in acne punctata, according to the *Practitioner*. The usual lotion of the flowers of sulphur with glycerine water is a valuable remedy, but from the readiness with which the sulphur separates it is inelegant and inconvenient, while it is not quite satisfactory in its results. A far more efficacious mode of using sulphur is to dust the face with pure precipitated sulphur every night with an ordinary puff used for toilet purposes. Recently two severe cases of acne of two years' standing, which had resisted the ordinary methods of treatment, yielded at once to sulphur thus applied. If the sulphur be scented with oil of lemon or roses it will form an elegant cosmetic.

THE USE OF HOT WATER IN DISEASES OF THE EYE.—Dr. Leartus Connor, *Am. Jour. Medical Sciences*, speaks very highly of the frequent local application of hot water to the eye in cases of acute conjunctivitis and blepharitis, and also in chronic hyperemia, granular inflammations, iritis, and corneal affections, in which he has used it with great success. The water should be as hot as the patient can comfortably bear with his hand. The patient leans over the basin and applies the water to the eye for a few minutes, from three to twelve times a day, according to the urgency of the case.

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MEDICAL COLLEGE BANQUETS.

During the past month and within one week of each other, the two Medical Schools in this city held their usual annual dinners. The attendance in both instances was very large, numbering about 150 at each, and the events were, as the students would say, a "grand success." Many of the guests came a long distance to do honor to their respective schools, and to be present at such interesting entertainments. The Trinity Medical College dinner was held at the Rossin House, and the Toronto School of Medicine in the Queen's Hotel. Both were "officially" conducted on strictly temperance principles, that is to say, no intoxicating liquors were used at the table, and the toasts were drunk in cold water. The speeches at both entertainments were much above the average after dinner business. The Trinity Medical dinner was presided over with much ability by the following gentlemen: Mr. Nattress, chairman; Mr. Sawers, 1st. Vice; Mr. Johnston, of Jamaica, 2nd. Vice; while that of the Toronto School was presided over by Mr. Knill, Mr. Coulter, and Mr. J. S. Draper, respectively, all of whom discharged their duties in a most agreeable and satisfactory manner. One most pleasing feature of these entertainments was the cordial greetings and the display of most kindly feeling between the faculties and students of the two schools. Representatives and delegates from each school were present at the respective dinners. We are glad to be able to bear testimony to the increased and increasing good feeling, harmony and sympathy which exists between these

so-called rival schools, for their should be no rivalry but honest and honorable competition. The toasts at both entertainments were nearly alike, viz.: the usual standing toasts to which were added the "Mayor and Corporation," "Universities, Colleges, and Sister Institutions," "The Faculty, Students, &c., of the respective schools," "The College of Physicians and Surgeons of Ontario," The "Toronto General Hospital," The "Press."

At the Trinity College dinner an additional toast was given following that of the "Queen and Royal Family," viz.: "The President of the United States," which was responded to in an able and eloquent speech by Rev. H. M. Parsons, pastor of Knox Church, Toronto. He spoke in feeling terms of the sterling character of the late President Garfield and the national unification which resulted from what at first seemed a national calamity.

In responding to the "Dominion Parliament," Hon. Mr. Mackenzie opened with a few happy hits, and then pithily referred to the useful part the Dominion Parliament fills in our Constitution, the freest in America. In noticing the remarks of the gallant Colonels who had preceded him in speaking, he said that Kingston Military School was capable of giving as efficient a military training as either West Point or any military college in Europe; and he questioned whether England herself could have given a readier response to the call to arms than did the Canadian volunteers at the time of the Fenian raid.

Hon. Mr. Mowat confined his remarks chiefly to the dignity of the physician's calling, the excellence of the medical institutions of the Province, and the legislation affecting the profession. Mayor McMurich replied in fitting terms to the toast of the "Mayor and Corporation."

The toast of the Colleges and Sister Institutions was responded to by Hon. G. W. Allan, for Trinity University, Vice-Chancellor Mulock for Toronto University; Principal Buchan for Upper Canada College; Drs. Graham and A. H. Wright for the Toronto School of Medicine, and Mr. Clelland for the class of this school.

Vice-Chancellor Mulock said among other things that he had it upon the authority of a distinguished Professor in a London Hospital, who visited Toronto recently, that the Canadian students who attend the London Hospitals are in regard to the-

oretical attainments, quite equal to English-trained students, but are somewhat deficient in the practical knowledge of the healing art. This was owing, he thought, to the limited population of our country and cities not affording that profusion of clinical material which was at the command of older and larger Hospitals. In referring to the question of affiliation, he said that whenever Trinity school desired the co-operation of Toronto University in aid of any step calculated to advance the cause of medical science, an earnest response would be given to the call.

Dr. Allison, of Bowmanville, and Dr. Burns, of Toronto, ably responded to the toast of the "Ontario Medical Council." "Trinity Medical School, its graduates and under-graduates," was responded to by Drs. Geikie and Spencer, on behalf of the Faculty and graduates, and Messrs. Camfield, Duncombe, and Cochrane for the class. Dr. O'Reilly and Mr. John Gillespie, replied to the toast of the "Toronto General Hospital." Dr. G. O. O'Reilly, of Fergus, acted as the champion of "The Ladies," and "The Press," was replied to by Dr. Fulton, of the LANCET, and Dr. Wright, of the *Canadian Journal of Medical Science*.

At the Toronto School dinner, the chairman, Mr. Knill, said that much good would come from these social meetings by affording the students an opportunity to express their opinions, or state their grievances. One of the grievances now felt by the students was a difference which existed between the latter and the Medical Council. It was notorious that for the last four or five years the students had acquired an unenviable reputation, and it would be well to consider whether they alone are entitled to all the odium heaped upon them. Every spring the public were treated to long dissertations upon the culpability of medical students, and those unseemly contentions which had occurred between the Council and the students were not compatible with the dignity of the profession. He was not defending improper conduct, if such existed, however, and hoped the unseemly squabbles would not again occur. He then pointed out what should be the aim and duty of the student, as well as his ambition after leaving college—that he should always try to tread in the highest paths of his profession.

Dr. F. W. Strange, M. P., replied to the

toast of the "Army and Navy." He pointed out the importance of the service, and the aid the medical fraternity could be to the military. The militia force, he said, was not aggressive, but only protective, but were ready for action in the moment of need. Mr. James Beaty M.P., responded for the "Dominion Legislature," and Mr. Badgerow, M.P.P., for the "Local." Mr. Beaty said, the medical body was not insignificant in any sense, even beyond their ordinary sphere. There were seven in the House of Commons, and one of these was the Speaker. If the rest of the House were disposed to ignore the rights of the profession, their force was strong enough to assert its own claims. He then dwelt on the merits of the Canadian Government, describing it as the freest on the earth and the best on the continent. It contained the best elements of the British Constitution, and none of the objectionable ones. The people didn't want annexation, he said, nor "independence" either; they did not want to support armies and navies of their own, for now, without feeling the burdens of connection with the Empire, we had the protection of British Imperial forces. Mayor McMurrich acknowledged the toast of the "Mayor and Corporation."

Honourable Edward Blake responded on behalf of the Toronto University. He said, there was no matter of greater importance connected with the cause of education than that the most liberal provision possible should be made for the higher education; for this was the great preparation to advancement in the range of avocations included under the liberal arts and sciences, as well as in the public positions many were called upon to fill. Thus the benefits of this education would be felt down through the pursuits of the people, redounding rewards back again upon the State which granted them. Some provision, he thought, for teaching the principles of jurisprudence in the higher institutions should be provided, and though he would not protest against the law "send for the doctor," something should be learnt outside the medical schools of the structure of the body and the laws of health.

Professor Rayner responded for Victoria College, and Rev. Principal Cavan for Knox College, both of whom were well received. Dr. Kennedy and Mr. Wallace responded for Trinity

Medical College, and students respectively. "Our Faculty" was responded to by Drs. Aikins, Barrett and Richardson. The Medical Council was ably represented by Dr. Burns. The Learned Professions was responded to by Rev. Dr. Wild and Dr. Tye, of Thamesville. The latter made a most excellent speech, but as the evening was now far advanced no report was made for the press. The "Toronto General Hospital," replied to by Dr. O'Reilly, and the "Ladies," by Mr. Patterson, brought the evening's entertainment to a close. At both dinners a number of songs were interspersed among the speeches, and an Italian string band discoursed appropriate music.

The annual dinner of the Royal College of Physicians and Surgeons of Kingston, was held on the 24th ult., and was a most successful gathering, a large number of the dignitaries of the limestone city being present.

SANITARY REFORM.

The subject of public health and sanitary reform is one which requires to be kept constantly before the profession and the public, until some efficient legislative measures are secured from the Government. It is a question of such vital interest to the welfare of the people and the prosperity of the nation, that it should take precedence of every other consideration. All merely political questions should be laid aside, in view of the great and inestimable importance of a question which has for its objects the life and health of the people. It is clearly one of the first duties of a Government to provide the means, wherever practicable, for the amelioration of the condition of the people, whether in the matter of sickness, distress by water or fire, or other public calamity. The members of the medical profession have been, we may say, so far, almost the only individuals who have interested themselves in the matter of public health. They have at no time, when a favorable opportunity presented itself, shown any indifference, inactivity, or want of appreciation in regard to measures having this object in view, but on the contrary have, from time to time, and in various ways, urged upon the Governments, Federal and Provincial, the importance of preventive measures. It is not a little singular, that in all countries physicians have been

foremost in urging upon the people and the authorities, the necessity for general systematic means for the prevention of sickness and the preservation of life. It is indeed almost entirely owing to the indefatigable efforts of the profession, that means to this end have been carried out in any country. But from whatever cause, whether or not the members of the profession in this country have been less importunate in this behalf, than those in Great Britain, Europe, or the United States, we are very far behind these countries in the efforts employed for promoting public health. We do not believe it would be in the least degree inimical to the interest of the profession in this country, if there were established upon a proper basis, a well organized sanitary system for the Dominion; on the contrary, such a system would add materially to the value of professional services, and place the profession itself on a higher level in public estimation than it occupies at present. It would be infinitely better in more respects than one, for municipalities and governments to employ medical men to give a portion of their time to the prevention of disease, than for the public to employ them for the cure of diseases which have for the most part been caused by the neglect of the most simple laws of health. Besides, the lessening of preventable sickness, is a much more worthy and dignified employment than the curing of it. We trust that the profession will lose no opportunity of urging upon the various Governments of the day, the very great necessity of thoroughly organized Sanitary Boards,—a Federal Board or Department for the Dominion, and a Provincial Board in each of the Provinces. The expenses of these Boards need not be very large at first. For the Province of Ontario, the annual expenditure need not exceed the sum of \$4,000 or \$5,000. In New York State the annual appropriation for this purpose is \$20,000. In Michigan, \$6,000. In Vermont and New Hampshire, the amount is somewhat less, but quite sufficient for the purpose of initiating the work. With the view of bringing this matter again under the notice of the Ontario Government, we have been solicited to enclose blank petitions to all our subscribers, with a request that they will not only sign the petitions themselves, but obtain as many signatures as they conveniently can, of prominent public men and others who may sympathize with the movement. The petitions when filled up should be returned to

this office at the earliest possible moment, on account of the near approach of the session, the estimates being even now, in all probability, under the consideration of the Government. When the petitions are all returned, it is proposed to appoint a large and influential deputation to present them, and to wait upon the members of the Government and press upon them the necessity for immediate legislative action.

THE HALIFAX MEDICAL COLLEGE.

The opening of the fifteenth annual session of this College took place on the 27th of October. Dr. R. S. Black, the President, delivered the opening address. After extending a sincere and cordial welcome to the students present, he pointed out the aims of the College, which were to give a sound, solid education, and to supply to the Maritime Provinces medical men able at first to identify and then to treat properly the various diseases that may be brought to their notice. He also referred to the high standing of their alumni in the schools of London and Edinburgh. Not being a member of the Faculty he spoke with freedom regarding the laborious and painstaking corps of Professors in the College. The lecturer said the profession they had chosen was a noble one, its grand aim being the preservation of the health and the cure of disease. No other science includes within its scope so many and varied departments of knowledge, yet they could not hope to master all, but must content themselves with a clear view of the principles, and a limited acquaintance with the facts of such as were pertinent to their pursuits. Many branches of science were of great value as feeders of our medical reservoirs, and the physician's office was to draw the healing waters. He concluded an able and eloquent address by saying that they were not to feel dismayed by the contemplation of the work before them, but to take courage and set themselves hopefully to the work, and order and system would soon be evolved from what now to them, appeared confusion and chaos. The Dean of the College, Dr. A. P. Reid, then addressed the students. He spoke of the changes in the method of practice, and the great advances made in medical science. He also gave sound practical advice to those about entering the

profession. It is expected that there will be a large attendance of students this session.

THE USE OF MALTINE.—Dr. J. Milner Fothergill (*London Practitioner*) says in regard to the use of Maltine, that in order to aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power, we add the artificial diastase "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter and mixes readily with the milk, gruel, &c., without interfering either with its attractiveness in appearance, or its tooth-someness; indeed its sweet taste renders the gruel, &c., more palatable. A minute or two before the milky mess is placed before the child, or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and mal-nutrition.

O TEMPORA ! O MORES !—We regret to see so many of our confrères rushing into print with every little accident that comes in their way. An on-looker must come to one of two conclusions, viz.: either that the medical man has had such a limited number of cases in surgery, that he is overjoyed by the occurrence of one or two trifling cases, and in the simplicity of his soul must needs publish them, to let the public know that he has had something to do; or that he is endeavoring to attract public attention by playing the role of the advertising quack. We regret to see an old and much respected confrère, occupying half a column in the *Port Hope Times* of the 18th ult., with a report by the Dr. himself, so it is stated, of four or five simple accidents in surgery to which he was called. When those who have grown grey in the service of the profession adopt such means of bringing their names into public prominence, what is to be expected from the younger members of the profession, who have at least some excuse for endeavoring to attract public attention?

A LITTLE MORE ESPRIT DE CORPS.—The case of the Queen vs. Dr. Washington of Orangeville, which has been before the Courts since April last, has recently been decided in the Drs. favor. The case was one of alleged assault, in which the magistrate (Mayor Henry, M.D.,) fined both parties \$5 and costs. Dr. Washington feeling that he had sufficient evidence to prove that he only acted in self-defence, appealed from Dr. Henry's decision, and the case was tried before the County Judge, but the Mayor's ruling was confirmed by this Court. It was then appealed to the Court of Queen's Bench, Toronto, before Judge Osler, and ended in the acquittal of Dr. Washington as above stated. It is much to be regretted that there is not a greater degree of *esprit de corps* among the members of the medical profession, for if the proper feelings had existed here, this action would never have gone beyond the Mayor's office.

PORRO'S OPERATION IN ENGLAND.—In October last Mr. Spencer Wells, as stated in the *British Medical Journal*, performed Porro's operation for the first time in England. The patient, aged 37, between five and six months advanced in pregnancy, was suffering from epithelioma of the cervix uteri. The operation is a supra vaginal amputation of the uterus in addition to the Cæsarian section. The uterus was brought out through an incision in the abdomen, the broad ligaments transfixed by silk ligatures external to the ovaries, the bladder dissected from the uterus, and the vagina divided all around close to the uterine wall. The opening from the peritoneal cavity into the vagina was closed by silk sutures. Very little blood was lost, and on October 27th, seven days after the operation, the patient was doing well.

TESTIMONIAL TO VIRCHOW.—A movement was recently set on foot in London, England, to obtain subscriptions towards the testimonial to be presented to Prof. Virchow, by his brethren in Germany, on the occasion of the completion of the 25th year of his professorship in the University of Berlin, and of his 60th birthday. Many of the leading physicians and surgeons in London subscribed to the fund. The presentation took place in Berlin on the 19th ult. The learned professor has again been elected to the Reichstag.

REVOLVING BOOK-CASES.—We desire to call the attention of our numerous readers to Johnston's Revolving Book-cases, manufactured by Baker, Pratt & Co., 19 Bond Street, New York. They are wholly constructed of iron, with adjustable shelves, highly finished in black and gilt ornamentation, and are exceedingly useful and convenient, as well as ornamental. We have one in use in our office, and prize it most highly. With a simple touch of the hand while seated at the desk, one can bring before him any book required for consultation. Their low price brings them within the reach of all. They are of different sizes, but the larger, three or four shelved cases, are the best, and are capable of holding from 60 to 100 volumes. Send for circular to above-mentioned address.

"FETCHING THE DOCTOR."—This is one of the latest and most exquisite of Rogers' famous "groups of statuary." It represents a lad, with a youth in front of him, on horseback, in hot haste to fetch the doctor to some fortunate or unfortunate sufferer. The lads seem fully to realize the importance of their mission, and are losing no time by the way. They evidently enjoy the excitement and the ride, and are urging the poor animal to the utmost speed consistent with safety to themselves. It is finished in Rogers' best style of art, and is suitable either for a parlor or library ornament, or for a doctor's office. It would make a most agreeable and appropriate Christmas-box. The price is only \$10. Send for catalogue of groups, to 23 Union Square, New York.

ANTIVIVISECTION PROSECUTION.—We learn from the *British Med. Journal*, Nov. 12th, that the Antivivisection Society of London has entered a criminal prosecution against Prof. Ferrier in the Bow Street Police Court. It is not at all creditable to the boasted intelligence of the British nation, that an eminent physician and man of science, whose valuable labors and important researches in reference to the diagnosis and treatment of brain diseases are recognized the world over, should be assailed in such a manner. It surely cannot be regarded in any other light, than as an abuse of the recent legislative enactments in reference to experiments upon animals.

TRINITY COLLEGE CONVOCATION.—The annual convocation of the University of Trinity College, for conferring degrees, was held in Convocation Hall on the 10th ult. The installation of the new Provost, Rev. Mr. Body, also took place, and a very pleasant reception was given him by the friends of the University, in the evening, which was largely attended.

The following gentlemen received the degree of M.D., C.M.:—W. A. Allen, G. W. Baker, J. Baugh, G. S. Beck, L. Bentley, T. G. Brereton, W. B. Duck, H. K. Kerr, T. A. Kidd, N. McPhatter, W. F. Peters, A. E. Stutt, T. Sullivan, A. McC. Sloan, and E. A. Spilsbury.

REMOVAL OF THE KIDNEY.—Dr. Barwell, of Charing-Cross Hospital, has again performed the operation of nephrectomy. The operation was undertaken for the relief of stone in the kidney, which had caused the formation of a large lumbar abscess. The patient, aged 18, recovered. This operation has also quite recently been performed by Mr. Whitehead, F. R. C. S. E., of Manchester, but the patient died on the fifth day after the operation. The total number of operations on record is 56; of these there were 27 recoveries and 29 deaths. The lumbar incisions show better results than those in the linea alba.

HYDROLEINE.—This preparation of Cod-Liver Oil has been before the profession of Canada nearly two years, and is gradually growing in favour. We have used it in our practice with most excellent results, and feel it our duty to bring it again under the notice of our readers. The members of the profession in this city also, who have given it an extended trial, speak in terms of the highest praise in regard to its efficacy. It is as agreeable to the taste as Cod-liver Oil can be made, and is readily assimilated by most patients.

BRITISH QUALIFICATIONS.—James Ross, M.D., McGill College, has been admitted Licentiate of the Royal College of Physicians, London. Dr. J. L. Foley, (Bishop's College), also received the L.R. C.P., London, on the 22nd Oct.

The following gentlemen have passed the primary examination of the Royal College of Surgeons, England. Dr. J. H. Betts, Kingston, and Dr. W. A. D. Montgomery, Toronto.

APPOINTMENTS.—Dr. J. W. Rosebrugh, of Hamilton, has been appointed by the Senate of Victoria College, Cobourg, as the representative of that body in the Ontario Medical Council, in the room of Hon. Dr. Brouse, deceased.

Dr. F. E. Woolverton, has been appointed Medical Superintendent of the Hamilton General Hospital.

Dr. N. McPhatter, of Fergus, has received the appointment of a surgency on the Pacific Railway.

Dr. Alfred Bray, formerly of Thorold, has been appointed Prof. of Toxicology in the Minneapolis Hospital Medical College.

Dr. J. L. Foley has been appointed Assistant Demonstrator of Anatomy in Bishop's Medical College, Montreal.

W. H. McDonald, student of Trinity Medical College, has been appointed medical assistant, Toronto General Hospital. The other assistants are Drs. Stark, Charlton and Sweetnam.

PRACTICES FOR SALE.—In our advertising pages will be found three country practices for sale, averaging annually \$2,000, \$4,000, and \$6,000 each, respectively. The parties are personally known to us, and we have every reason to believe that the respective values of these practices are not over-estimated.

LITERARY SHEAVES.—Dr. P. Bender, of Quebec, has entered the list of authorship, in the production of a book entitled "Literary Sheaves," or "*La Littérature au Canada Française*," drama, history, poetry, romance, etc. It is published by Dawson Bros., Montreal. Price, \$1.

We regret to learn that Dr. Bell, Medical Superintendent of the Montreal General Hospital, has been prostrated with typhoid fever. We trust that the attack is not a serious one, and that he will soon be able to be about again.

NEW MEDICAL TARIFF, QUEBEC.—The new Medical Tariff for the Province of Quebec, has recently been issued. Copies may be obtained by addressing Dr. Belleau, Quebec, or Dr. F. W. Campbell, Montreal,

CORONER.—Dr. R. W. Bell, of Peterboro', has been appointed associate coroner for the county of Peterboro'.

CHEAP AND VALUABLE READING.—Back numbers of "London Lancet," (Am. reprint), for four years; London "Medical Times and Gazette," (weekly)—not second to "Lancet,"—four years; "New York Med. Journal," five years; and "Scientific American" for three years, may be had—the lot very low—as the owner has no use for them. Cost \$75 originally. Apply to Messrs. Dudley & Burns, 11 Colborne Street, Toronto.

The death of Dr. Foulis, of Glasgow, of diphtheria, is noticed in our foreign exchanges. His name is best known in connection with his successful cases of extirpation of the larynx.

Books and Pamphlets.

DISEASES OF OLD AGE. By J. M. Charcot, M.D., Professor in the Faculty of Medicine of Paris, etc. Translated by Leigh H. Hunt, B.Sc., New York; with additional Lectures by Alfred L. Loomis, M.D., etc. Published as the June, '81, number of "Wood's Library of Standard Medical Authors."

This book contains 31 lectures; the first 21 of which, we are informed, are by Charcot, and the remaining 10 by Dr. Loomis. We mention this fact merely for the benefit of those who might fail to detect the boundary line between the production of the eminent French Professor, and his trans-atlantic admirer, who has had the business tact of availing of the favorable opportunity of presenting his contributions to medical literature, in company with those of one of the most brilliant scientific writers of the present age. It is, however, our impression, that to a very respectable minority of readers no premonition will be requisite. The transition from Charcot to Loomis must, to every observant student, be as obvious as that of a stratiform break to the eye of a working geologist: not indeed that we would be understood as implying that Dr. Loomis' part of the volume is undeserving of careful perusal. His observations on "Senile Pneumonia, Senile Bronchial Catarrh, Asthma, and Hypertrophy of the Prostate Gland," are well deserving of attention, and had they been presented in a separate and comprehensive work, we think the author would have evinced more delicate discretion. If the object of the Messrs. William Wood & Co. has been mainly to swell

their June number up to a predetermined bulk, so as to give to subscribers a fixed normal quantity, it would be wrong to censure their honesty of purpose; still we think they might have selected from their abundant supply, as an addendum to Charcot's lectures, some little monograph in closer affiliation.

Of the 21 lectures by Charcot, it would be impossible to speak in terms too highly commendatory. If, however, we should signalize any as deserving of special attention, those on Clinical Thermometry seem to us to have high claim. The following passage, as bearing upon a very important criminal case recently tried in Montreal, we regard as not unimportant:

"It is undoubtedly on account of inanition that a more or less enduring fall in temperature has been quite frequently (Wolff) observed in subacute and chronic mania, with symptoms of depression, chiefly melancholia, attended with stupor. But the interpretation we offer cannot be applied to all cases of this kind. Quite recently, indeed, Dr. Löwenhardt, of Sachsenberg, has reported two cases of insanity where the rectal temperature reached the almost incredible points of 31°, 32°, and 32.5° C. (87.8°, 89.6°, and 90.5° Fahr.), persisting several weeks, while nutrition did not appear to be affected in any noteworthy degree. One of these patients was excitable, the other erotic, and both took sufficient nourishment."

In the case above alluded to, that of *Hayvern*, who is now under sentence of death in Montreal gaol, Dr. J. Howard testified that he had found the temperature (only axillary, most probably) 92.5° Fahr., but three (we believe) distinguished physicians testified that they had never met with so low a degree unless in moribund persons, and the Judge characterized Dr. Howard as a blind enthusiast! The old adage, "*ne sutor ultra crepidam*," is an admonition that might profitably not be ignored either by learned judges, or by medical witnesses; "there are more things in heaven and earth than their philosophy may have dreamt of." A few years ago two conceited surgeons, of London, swore that a lunatic could not have two or three ribs broken, without giving indications of subsequent pain. Every asylum physician in Europe and America laughed at their stilt-walking ignorance. Dr. Howard may now very excusably turn the tables on his poorly-read confrères. With

the corroboration of Charcot, Wolff and Löwenhardt, Dr. Howard may well afford to disregard the pedantic criticism of his medical opponents, and the opprobrium cast on him by a judicial cobbler, who, overlooking his last, sticks his awl into his own thigh.

GENERAL INDEX TO ZIEMSEN'S CYCLOPÆDIA. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

The profession are much indebted to Messrs. Wood & Co. for the admirable manner in which they have issued this most elaborate and comprehensive work. The 18th and 19th volumes we presume have been judged more suited for a German stand-point of State Medicine and Hygiene, therefore Dr. Buck's two volumes on Public Health have been furnished the subscribers in lieu. On reference to the index, all the articles in the 18th and 19th volumes—which we have not received, consequently conclude have not been translated for this edition—we find to be on subjects directly or indirectly bearing on hygiene. The index is numbered volume xx. and contains no less than 499 pages. Comment is needless on the exhaustive nature of a work that requires for index 499 closely printed pages.

A MANUAL ON DISEASES OF THE EYE AND EAR. For the use of Students and Practitioners. By W. F. Mittendorf, M.D. New York: G. P. Putnam's Sons.

The Author has managed to compress into one volume of moderate size a pretty full account of the diseases of both the eye and ear—a combination which will be appreciated by many. The work embodies the recent advances on these subjects, and will prove an excellent text-book for advanced students, as well as a reliable guide for general practitioners. The value of the book is enhanced by ophthalmoscopic plates from the works of Liebreich and Wells, and coloured illustrations from Sichel's Atlas; and also by a plate shewing various appearances of the drum-head after Politzer.

CHAMPIONNIERE'S ANTISEPTIC SURGERY. The Principles, Modes of Application and Results of the Lister dressing. Translated from the French by Frederic Henry Gerrish, A.M., M.D., Bowdoin College, Maine. Portland: Loring, Short and Harmon. Toronto: Willing and Williamson. Price \$2.25.

This is the first work on Antiseptic Surgery published in America, and should be in the hands of every practitioner who desires to treat wounds by the Listerian Method. It contains all the information necessary to enable any medical practitioner to apply this dressing without difficulty, and in full consonance with the Listerian theory. While all may not agree as to the necessity and utility of this method of treating wounds, none should be ignorant of the details and the theory upon which the practice is based. All this is fully taught in the volume before us.

THE PHYSICIANS HAND BOOK FOR 1882, by W. and A. D. Elmer, M.D. New York: W. A. Townsend, Publisher.

This work has been published for nearly a quarter of a century, and is no doubt well known to the profession in Canada and the United States. It contains features entirely different from other visiting lists. It is not only a visiting list, but also a ready reference book on diseases and their appropriate remedies, and contains a long list of remedial agents and their doses. The United States Government has adopted it for the use of the medical officers of the army and navy.

THE MEDICAL RECORD VISITING LIST FOR 1882. Published by Wm. Wood & Co., New York.

This list is arranged for 30 or 60 patients, and is very neatly gotten up, of convenient size, and handsomely bound and finished. In this latter respect it is superior to many in the market. It has one drawback however, especially for city practitioners, viz.: there is no column for the street or number of the residence of the patient. We hope to see this defect remedied in future editions.

Births, Marriages and Deaths.

On the 27th of September, J. H. Morrison, M.A., M.D., F.A.Sc., of St. John, N. B., to Ida, youngest daughter of Thomas W. Kierstead, Esq., of Rothsay, N. B.

On the 16th of November, J. L. H. Neilson, M.D., Surgeon-Major "B." Battery, to Wilmot, eldest daughter of Major J. B. Ridout, Kingston, Ont.

In Detroit, Mich., on the 22nd October, Dr. N. Munro, formerly of Brucefield, Ont.

At Stella, Amherst Island, on the 24th of Oct., William G. Middleton, M.D.

On the 17th of November, Dr. A. McMichael, of Gorrie, aged 41 years.

THE CANADA LANCET,

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Original Communications.

ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.*

BY A. M. ROSEBRUGH, M.D. SURGEON TO THE TORONTO EYE AND EAR DISPENSARY.

Read before the Toronto Medical Society, Dec. 1st, 1881.

ELECTRICITY IN INSANITY.

The first systematic use of electricity in the treatment of mental diseases, according to Althaus, was made in France in 1845. Teilleux and Auzouy found that although it was no specific, it nevertheless did good in well selected cases. Remack and Benedict report favorably of its use, and Dr. Arndt of Griefswald, who has given special attention to the subject, asserts that electricity is an invaluable remedy, of equal importance with quinine, iron and baths, and of far more importance than narcotics, in the treatment of insanity. In 1873, Drs. Williams and Newth of the Sussex Lunatic Asylum, and Dr. Bryce of the Alabama Lunatic Asylum, reported favorably of the use of electricity in mental diseases. Dr. Bartholow states that the treatment of psychical disorders by electricity has been productive of some very striking results: and Drs. Beard and Rockwell predict that an important future is in store for the scientific and faithful use of electricity in our public and private asylums.

Up to the present time, the best results seem to have been obtained in those forms of insanity associated with or dependent upon debility and nervous exhaustion. Arndt recommends "peripheral faradization" (general faradization?), and Bartholow,—a modification of central galvanization. Beard and Rockwell recommend central galvanization as the best means of influencing the central nervous system, and in cases associated with boisterous depression, they would alternate central galvanization with general faradization. They

make the first tentative applications very cautiously, and the strength of the application and the time of the sitting gradually increased, as the patient is able to bear the treatment.

Dr. Clifford Albutt of the West Riding Lunatic Asylum, Leeds, uses galvanism in acute primary dementia, in mania, and in atonic melancholia. He states that in mania and in atonic melancholia, distinct improvement takes place, and that in acute primary dementia the improvement is marked.

SPASMODIC DISEASES.

"Of spasmodic diseases this general law holds, that when recent, even though violent, they yield readily to electrical treatment; but when longstanding, they are easily palliated, cured with difficulty, and are prone to relapse."—(Beard and Rockwell).

According to Bartholow, there is no fact in regard to galvanism more conspicuous than its power to allay spasms; that when a strong (continuous) current is passed through a muscle, irrespective of direction, it remains quiescent and relaxed until the current is broken.

In *Writers' cramp* the treatment should be adapted to the condition present—whether local and muscular—local and nervous, or whether the affection arises from intra-cranial lesions. To the muscles fatigued from over use, the galvanic current is applied, and to the muscles affected with paresis, and degeneration, the faradic current is applied. The individually affected muscles are picked out and the current applied with Duchenne's small electrodes. The current should be just strong enough, when interrupted, to cause contractions, and the muscles should not be fatigued by long applications. In some cases the galvanic current is also applied to the upper part of the spine, and to the median and radial nerves. Or the positive electrode may be placed over the cervical plexus and the descending current applied by the labile method to all the muscles from the shoulder down. When there is anæsthesia, the faradic current and the metallic brush should be used. Systematic gymnastic training is recommended, and rest from occupation is said to be almost imperative.

Torticollis or wry neck, in the early stages, may be cured or relieved by electrical treatment alone. Spasm of the muscles of the neck on one side

* Continued from page 101.

causes the head to be turned to the opposite side, where the muscles become flabby and weak. The treatment consists in passing a localized galvanic current through the contracted muscles, and the faradic current through the relaxed muscles. Beard and Rockwell use mild currents, but Bartholow uses 30 to 40 cells of the galvanic battery for the tense and rigid muscles, and a faradic current strong enough to throw the weak muscles into very active contractions. He makes each application last about five minutes.

Epilepsy is treated by Rockwell apparently with encouraging results. He uses general faradization and central galvanization alternately, the patients being treated every other day, and the treatment continued for several months.

Rheumatism and Gout.—Rheumatism is a constitutional disease and requires constitutional treatment. The best results are obtained by general faradization, central galvanization, and the alternate galvanization and faradization of the affected joints. Swollen joints are treated by mild and steady currents,—the application being made, preferably, with the positive electrode. Prolonged local applications of the galvanic current may be tried for anchylosis. "The most uniform results are obtained in the muscular form; the next best are the subacute and acute, and the least satisfactory of all in the chronic stages." In *lumbago*, *pleurodynia*, and *stiff neck*, mild currents, either the faradic or the galvanic, are used locally. In *lumbago*, some authors prefer strong galvanic currents, one pole being placed on each side and the current applied transversely. An attack of *myalgia* may sometimes be completely cured by a single application of a mild faradic current, *prolonged for one or two hours*.

In *gout*, in the chronic form, general faradization and central galvanization are to be tried, with a view of raising the tone of the system. Local faradization seems to be of service in some cases; the pain may be temporarily relieved by either the galvanic or the faradic current, the positive electrode being used and the current not strong enough to increase the pain. In *muscular rheumatism with paralysis*, the interrupted galvanic current is used, and in chronic articular rheumatism, dry faradization of the skin around the joint is preferred by some. Stimulation of the trophic system, by means

of galvanization of the cervical sympathetic, will assist the absorption of nodosities about joints.

HYSTERIA AND ALLIED AFFECTIONS.

Under this head, Beard and Rockwell include hysteria, nervous exhaustion, hypochondriasis, melancholia, spinal irritation, and insomnia; and claim that for this class of diseases electrical treatment is especially adapted and in which its success is most remarkable.

It is in the treatment of these affections that these authors seem to have had their greatest success in the use of their methods of general electrization. Hysteria and hysteroid affections all depend, they affirm, upon constitutional disease, and are most successfully treated by the tonic and sedative influence of general faradization and central galvanization.

In hysteria, in addition to the constitutional treatment by general electrization, paralysis or rigid contraction of certain muscles will require localized treatment,—the former by the faradic and the latter by the galvanic current. In cases of extreme hyperæsthesia, Benedikt recommends the patient to be placed under chloroform before applying general electrization, and using strong currents.

In *hypochondriasis* and *melancholia*, galvanization of the cervical sympathetic is used in addition to general faradization and central galvanization. The positive electrode is applied to the sympathetic, beneath the ear; the negative electrode is placed on the back of the neck, and a current of 10 or 12 cells used for about two minutes. The negative electrode is then removed from the back of the neck and placed over the stomach, and the positive is applied to the head, neck and spine, as recommended in central galvanization.

In *nervous exhaustion* or general debility (neurasthenia), the electrical treatment is by general faradization and central galvanization. General faradization alone is said to be rapidly efficacious in some cases. The electric treatment, however, in these cases is simply to supplement other treatment.*

* Nerve tonics, such as strychnine, phosphorus, arsenic, etc., are given internally, and rest, diversion, etc., enjoined upon the patient. Dr. Weir Mitchell, in the treatment of nervous subjects, proposes to improve nutrition by seclusion, massage, inunction of fat, and a method of general faradization by means of localized faradization of all the superficial muscles.

Spinal irritation is part of the hysterical constitution and requires the same constitutional treatment. In addition to the treatment by general faradization and central galvanization, the galvanic current is applied separately to the spine and cervical sympathetic; and in case of tenderness, counter-irritation is applied over the sensitive vertebræ, and phosphorus or strychnine administered internally.

In the treatment of *insomnia*, it is claimed that there is no remedy which permanently relieves the symptoms in so large a proportion of cases as electricity. Improvement in sleep appears to be one of the earliest effects of a course of general electrization,—“a result of the improvement of the morbid condition on which the insomnia depends.” Simple wakefulness, unaccompanied by disease, may be relieved either by the application of the faradic current to the head and spine, the application of the galvanic current to the head and sympathetic, or by general faradization.

Diseases of Women.—According to Rockwell, the diseases peculiar to women in which electrical treatment has been most successful are amenorrhœa, dysmenorrhœa, and menorrhagia. Tripier in France and Bartholow of Philadelphia were among the first to advocate the treatment of structural diseases of the uterus by galvanism. In cases of chronic metritis, congestion without plastic effusion, sub-involution, etc., the latter author finds both the faradic and the interrupted galvanic current highly serviceable. The faradic current has also been used instead of ergot in cases of uterine inertia, post-partum hæmorrhage, and retained placenta. It has also been used for the expulsion of polypi, moles, and hydatids. The faradic current is used in all cases requiring the muscular action of the uterus, while the galvanic current is preferable when nutrient changes have taken place.

In cases of *amenorrhœa*, dependent on anæmia, chlorosis, or nervous exhaustion, the constitutional condition is treated by internal medication and by general faradization, without applications directly to the uterus.

In the treatment of *dysmenorrhœa* by electricity, the results are said to be brilliant, even after years of ineffeual treatment by other means. Internal applications are usually not necessary. Either the faradic or the galvanic current may be used, but

the best results are claimed for the latter. One electrode is placed on the lumbar spine and the other on the hypogastric region. The current from 12 cells is applied for about five minutes, three or four times a week. The galvanic current is applied to the whole length of the spine as well, and in some cases general faradization is also used.

In cases of *menorrhagia*, free from organic disease, and occurring near the climacteric period, general faradization is employed, when there is inactivity of the liver and constipation, associated with nervous exhaustion.

MISCELLANEOUS DISEASES.

Diseases of the Organs of Digestion.—In the treatment of disorders of the digestive tract, the faradic current is preferred. It acts more vigorously on the muscles and produces more powerful mechanical effects. One electrode (usually the negative) is applied to the feet, coccyx, or spine, and the other electrode is applied to the abdominal viscera. Or the patient may be treated by general faradization. General faradization is also useful in nervous dyspepsia, from its influence more especially on the nervous condition upon which the dyspepsia depends. General faradization is also used in diarrhœa and constipation, and is held to be beneficial from the improvement in nutrition that follows this method of using electricity. In obstinate cases of constipation, one electrode may be placed in the rectum, and the other applied at different points on the abdomen. Strong currents may be used.

Diseases of the Bladder.—Incontinence of urine is frequently associated with hysteria and spinal irritation, and requires treatment for the constitutional condition. When the affection is purely local, it is treated by strong faradic currents directed through the neck of the bladder. One pole is placed over the symphysis pubis, and the other over the perinæum, in males, and over the lower part of the sacrum in females. In recent cases and in the young the prognosis is said to be favourable, but depending, of course, upon the nature of the malady with which the incontinence is associated.

“Paresis and paralysis of the bladder so frequently depend on incurable diseases of the spine, that the prognosis is, as a rule, unfavorable as regards a complete cure. Relief and improvement,

even in very bad cases, may be gained by faithful treatment, but entire recoveries are exceptional.

"The treatment should be external and internal, with both the galvanic and faradic currents, combined with central galvanization.

"External applications may be made, placing one pole, the negative, over the symphysis pubis, and the other on the back, or at the nape of the neck, and passing very strong faradic currents with interruptions.

"Internal applications may be made either with the insulated catheter electrode, or with Duchenne's double vesical electrode.

"The catheter electrode may be connected with the negative pole while the positive is at the hypogastric region or back. By means of the double exciter of Duchenne the current can be more exclusively localized in the muscles of the bladder than by any other method." (Beard and Rockwell.)

Impotence is also treated by electricity. When it depends upon disorders of a general character, such as the immoderate use of sedative narcotics, sedentary habits, or mal-nutrition from any cause, it demands "the general constitutional tonic influence of general faradization." The local treatment is by placing one pole on the perinæum and the other on the testicles (the testicles may be placed in a cup of warm water in which one pole of the battery is immersed). Either current may be used, but the faradic current is preferred, and the application is not extended beyond ten minutes, "Impotence like seminal emissions, may sometimes be treated by connecting the steel sound introduced into the urethra with one of the poles of the faradic current, thus combining the toning effect of pressure with the toning effect of electricity on the relaxed parts." (Beard & Rockwell).

Exophthalmic Goitre.—Graves' disease, which is supposed to be due to enervation of the sympathetic, according to Rockwell, is almost invariably benefited by galvanism. The anophthalmia and the enlargement of the thyroid gland do not always disappear, but the violent palpitation which constitutes the most distressing symptom according to this author, is decidedly and permanently alleviated. The positive electrode is placed just above the sixth cervical vertebra, and the negative in the auriculo maxillary fossa. The negative electrode, after remaining in this position one minute, is gra-

dually moved down along the inner border of the sterno-cleido-mastoid muscle to the sternum. A current from 6, 8, or 10 cells is used and this part of the application should not last longer than two or three minutes. The negative pole is now removed to the epigastrium (the region of the solar plexus) and the positive placed again in the auriculo-maxillary-fossa and 18 or 20 cells used. The positive electrode after remaining about one minute in this position, is gradually moved to the back of the neck where it is allowed to remain one or two minutes longer,

Sequelæ of Acute Diseases.—Dr. Rockwell uses electricity for the relief of the varied symptoms that follow cerebro-spinal meningitis, diphtheria, and intermittent fever. In the treatment of the sequelæ of cerebro-spinal meningitis, he relies upon galvanization of the spine and central galvanization. For the paralysis following diphtheria he finds in most cases general faradization is sufficient without localized applications. In chronic cases of intermittent fever, after the use of quinine and other tonics, he uses general faradization, not as a specific, but for its beneficial influence over the processes of secretion and excretion, and for its constitutional effects.

Electrolysis, galvano-cautery and the treatment of diseases of the eye, ear, nose and larynx by electricity, are subjects, the discussion of which must be reserved for another occasion.

ON DIPHTHERIA*.

BY H. K. KERR, M.D., C.M., F.T.M.S., HAMMOND, N.Y.

Ætiology.—Diphtheria is an acute specific disease, highly infectious, contagious, and sometimes epidemic. It is held by some, that the propagating germs of the disease are contained only in the throat deposit, but careful research warrants the conclusion that they are given off from the breath and also present in the excretions of the body. It appears to be more contagious than infectious, as those who are in constant attendance on diphtheritic patients, inhaling their breath and exposed to the liability of having the diseased products coughed out upon them, contract the disease more readily than others who may live in the same dwell-

* Being a Thesis for the M.D. Degree in the University of Trinity College, Toronto.

ling, but who are not in such close contact with them.

The infection lasts for a considerable time after convalescence and clings to houses, rooms, furniture, etc., and especially so if hygienic measures have not been thoroughly attended to. Some authors doubt the possibility of inoculation with the deposit. No such doubt, I think, need exist. My predecessor, Dr. F. R. Sherman, of Hammond, N.Y., caught it in this way. He assisted in performing tracheotomy on a patient with primary laryngeal diphtheria of a malignant type. During the operation a tenaculum pulling suddenly through the tissue scratched his finger deeply. He neglected the wound until after the operation. It inflamed in a few hours, showing the diphtheritic canker. He was taken down with the disease in its worst form and died in the course of a week.

A sporadic form of the disease is recognized, resulting from bad drainage, etc., but imperfect hygienic conditions are not so much a cause of diphtheria as of low fevers.

Predisposing Causes—Age, sex, climate, susceptibility, exhaustion, and nervous irritability. The age most favorable to an attack of diphtheria is put down at from five to ten years. From four to fifteen years is quite as near the mark. No age is exempt. I had under medical treatment recently, a child only ten months old with diphtheria, and know of a man of 76 years who also had the disease not long since. Sex is generally supposed to make no difference. I think, under certain circumstances it does. Girls seem more liable to contract the disease from 15 to 18 years than boys of that age. The termination appears less favorable in adult females than in adult males. Hot dry seasons favor the spread of the disease. Heavy autumn rains and moist depressing atmosphere frequently act in the same way. Some families are more susceptible to the disease than others, and the same may be said of individual members of a family. Some are so predisposed to it that they might be said to be of a *diphtheritic diathesis*. In such the disease is often of a malignant nature, not unfrequently carrying off almost entire households. Again it may be of a mild type with a susceptibility to frequent attacks.

Exhaustion due to previous disease, nervous irritability, over-exertion, dissipation or any cause that reduces the vital energies of the system, predisposes

to the disease and obscures the chances of a successful termination.

Anatomical Characters—Swelling and inflammatory redness of the soft palate, tonsils, etc., followed by the appearance of patches of exudation of a yellowish white or grayish color. These coalesce, forming a parchment-like membrane, covering the mucus surface of the fauces, extending to the mouth and nose and sometimes into the conjunctiva, trachea, œsophagus, stomach, etc. There is an increased flow of viscid secretion, the tongue covered with a dark grayish or brownish coating. The diphtheritic membrane becomes thickened by the formation of additional layers underneath. When removed it carries most of the epithelium with it, revealing the formation of ulcers. The lymphatic glands at the angles of the jaw become inflamed and enlarged. The neck may be considerably swollen owing to the infiltration of serum into the surrounding tissues. After death the various organs of the body are found to be congested, collapse or insufflation of the lungs, coagula in the heart and great vessels, parenchymatous inflammation of the kidneys, enlargement of the spleen and absorbent glands are the abnormal conditions, some or all of which are usually found.

Symptoms—The incubation period ranges from 48 hours to a week, usually from two to four days. There is a feeling of lassitude, diffused pains, chilliness, anorexia, increased temperature, headache, nausea, drowsiness, stiffness and soreness about angle of jaw, increased on swallowing. Much enlargement of the cervical glands and intense redness of the throat indicate a severe attack. The throat symptoms and the severity of the constitutional condition may, however, bear no necessary relation to each other. Articulation may be difficult and imperfect, and taste and hearing interfered with. There may be vomiting and diarrhœa, followed by convulsions and coma. The skin is natural, tongue thickly coated. On examination, the fauces, tonsils and uvula are found to be inflamed and swollen, in some instances almost entirely filling up the throat. There is much redness with more or less diphtheritic deposit. Enlargement of the glands at the angles of the jaw and tumefaction of the tissues of the neck are always present. There is a frequent desire to hawk, the false membrane being coughed up in pieces. The infection of the nasal passages is indicated by a

sanious discharge from the nose and posterior nares. Infection of the larynx is indicated by a hoarseness of the voice, croupy character of the breathing, paroxysmal exacerbations of dyspnoea, etc. The breath and emanations of the body become extremely fetid. Hemorrhages may occur, epistaxis being quite common in bad cases; urea is largely in excess.

Varieties—The different forms run into each other and are sometimes difficult to distinguish, but the classification of Sir W. Jenner is the nearest perfect. Mild form: Symptoms chiefly local, slight stiffness and soreness at the angles of the jaw, redness and some inflammatory exudation on the tonsils and soft palate. There may be more or less pyrexia, soon passing away. Recovery is speedy, without complications, and followed by no sequelæ.

Inflammatory form: Symptoms, local and general. Patient very ill, temperature high, much depression, pulse feeble, tonsils, uvula, glands of neck, etc., much enlarged, rapid appearance of exudation deposit, much inflammation of the throat followed by ulceration and sloughing. There may be laryngeal complications, indicated by croupy breathing—urine febrile, with albumen and casts.

Insidious form: Symptoms as a rule not urgent—may be no general disturbance, excepting malaise, until laryngeal complications set in, indicated by wheezing, crowing respiration and followed by depression, prostration and suffocation.

Nasal form: Chiefly characterized by a fetid discharge from the nose, posterior nares, etc. There is low fever, throat inflamed and much swollen. Larynx may be suddenly attacked or recovery may take place on subsidence of symptoms.

Primary Laryngeal form: The larynx is the original seat of the disease in this form. Exudation may extend to pharynx, trachea, bronchi and lungs. Very fatal, not easily distinguished from membranous croup.

Asthenic form: Symptoms are of a typhoid character from the outset or shortly after the disease has asserted itself. There is much depression and prostration. Patient becomes sallow or dusky yellow colored, pulse weak, small and irregular, tongue covered with a dry brown coating, with sordes on lips and teeth. There is extensive ulceration of the soft structures of the throat. The amount of throat deposit is variable, usually soft and pulpy.

The breath is very disagreeable. Delirium supervenes followed by death.

Complications—The kidneys are liable to be affected. An abnormal condition of the epithelium of the tubes is sometimes followed by parenchymatous inflammation. The urine is diminished in quantity, sometimes suppressed. It may contain albumen and casts. The disease may extend to the trachea and bronchi involving the lungs. Insufflation, lobar or lobular pneumonia, giving way of air vesicles, collapse and pulmonary apoplexy are complications not unfrequently met with. An erythematous rash, and purpuric spots on the skin are sometimes noticed—the latter in very severe cases. Hemorrhages from the mucous passages are not uncommon, chiefly epistaxis. Sequelæ very liable to follow bad cases of diphtheria. Recovery may be slow with the presence of considerable albumen in the urine for a time. Nervous disorders are the more important—paralysis, motor and sensory. It may affect the pharynx and palate, interfering with deglutition and articulation only. Two or three weeks usually elapse before these symptoms show themselves. They may last from three weeks to three months. About the end of the second month is the most critical time. A continuance of the paralysis after this period may be regarded as serious. Fortunately the paralysis is due to a poisoned condition of the blood, and not to abnormal condition of the nerve centres. True diphtheritic paralysis is a serious complication. It commences with the throat, palate, etc., and extends progressively to other organs. There is much difficulty in swallowing, the food regurgitating through the posterior nares. Articulation becomes very imperfect, sometimes the power of speech is entirely lost. The mucous membranes become affected and the special senses impaired. The sense of smelling is either absent or perverted. The ciliary muscles become paralysed, preventing the proper adjustment of the eye. The limbs are next affected. The muscles are more or less paralysed, accompanied with numbness and tingling of the skin. The muscular tissue may continue to waste until the patient is unable to stand. The bladder becomes atonic, causing retention of urine; constipation is not uncommon as a result of paralysis of the abdominal muscles. When the muscles of respiration are affected difficulty of breathing is experienced. Respiration may cease entirely, due to this cause.

Paralysis of the heart may come on slowly, reducing the beats until it stops entirely. The nerves are subject to a painful sensation of a neuralgic character, often very severe. Adults mostly recover when the heart and respiratory organs are not implicated. In children, nervous sequelæ are often fatal.

Duration—The disease may last from a few days to two weeks, but complications may extend it to three weeks, a month, or even more. Relapses are apt to occur through exposure to cold, etc., after apparent recovery.

Termination—The chief dangers are (1) suffocation, mostly in those under five years, generally taking place during the first week. (2) Asthenia, generally in adults occurring after first week. (3) Uremia, Septicemia, etc., in cases in which the poison is so virulent and the system so impregnated with it as to cause death before the symptoms have time to fully manifest themselves. (4) Pulmonary complications, disease extending down respiratory passages affecting lungs, etc. (5) Secondary nervous phenomena, progressive paralysis of throat, tongue, eyes, limbs, bladder, etc., death resulting through general marasmus or interference with the action of the heart.

Prognosis—The prognosis is always serious, as grave symptoms may set in at any time. About one half the deaths from diphtheria, in children, result from formation of croupous membrane. Severe cases are more likely to be followed by severe sequelæ. The dangerous symptoms are, difficult cranky breathing, extensive ulceration of the soft structures of the throat, epistaxis, constant discharge from the nose of a fetid sanious fluid, weak, irregular, thready pulse, intermittent action of the heart, retention or suppression of urine, high color of urine with presence of much albumen, bloody casts, etc. A persistent high temperature is always serious.

Treatment—The strictest care and attention is necessary in every case of diphtheria. In bad cases the patient must take to bed at once and remain there until convalescence has set in. The atmosphere should be kept moist and a uniform temperature of 68° should be strictly maintained. In the case of children, tubing may be employed to convey steam into the tent arranged over the crib in which they lie. Disinfectants are to be freely used,

and due ventilation and cleanliness rigidly attended to. Any clothes used in wiping away discharges from the nose or eyes should be burnt. Care should be taken to prevent children and others from coming in contact with the patient unnecessarily. The atmosphere can be kept moist by means of the steam from a tea kettle kept boiling in the room with carbolic acid water. Inhalations of the vapor of hot water and slaking lime are invaluable and should never be omitted in serious cases. It is advisable to have all unnecessary clothing, furniture, curtains, etc., removed from the room as the contagium clings to these for an indefinite period. The apartment should be large, well ventilated, and as cheerful as possible. The bowels should be kept regular. If there is a tendency to constipation, a mild saline mixture may be given but avoid purgation. Patient to be nourished with milk, lime water and beef tea. Stimulants are not required at the outset for children but should be resorted to when the heart's action is weak, and the imperfect circulation and coldness of the extremities show that the vitality of the system is flagging. I am not unwilling to believe that in adults good brandy in full doses may be valuable at the onset of an attack. The temporary impregnation of the system with the *alcoholic* poison seems to fortify it against the encroachments of the *diphtheritic*. Metaphorically speaking, "the devil divided against himself cannot stand." If the patient cannot or will not swallow, enemata of milk, egg, brandy, etc., may be administered.

As soon as diphtheria is diagnosed, hot irritating applications should be applied to the throat extending to the ears on each side. Two or three layers of flannel, saturated with a mixture of kerosine, collodium, turpentine, etc., answers this purpose admirably. Kerosine alone is often all that is necessary. Pork and mustard also answer the purpose very well. Warm fomentations of hops are good for their soothing effect. These may remain until a considerable amount of counter-irritation is set up, when they should be discontinued for a time and then re-applied. In the *interim* other cloths should be put around the neck to prevent external cold. Pieces of chopped ice should be sucked by the patient, as the cold internally is grateful and does good. Theory: The cold internally *drives* out the inflammatory congestion by its depressing effect, contracting capillary vessels, etc.,

the heat externally *draws* out the inflammation by its counter-irritant and derivative action.

There is no specific for diphtheria. Internally, tr. ferri mur., glycerine, etc., in full doses, with quinia sulph., pot. chlor., glycerine, etc., constitute the chief medicinal treatment. Saturate the system with iron. Carbolic acid dil., and a mixture of tr. ferri mur., acid hydrochlor. and pot. chlor., make good gargles. The former may be applied in spray. Permanganate of potash is also used with much benefit, when the ulceration is extensive. Nitrate of silver, in strong solution, is used for the same purpose, the ulcers being touched with the solid stick. I have never used the nitrate of silver. Ferri sub-sulph. and carbolic acid are valuable for the removal of the membrane. Sulphur should be dusted every hour or two on the cankerous surface. In children it may be blown in with a quill. For children, quinia sulph., etc., may be mixed with syr. sarsæ. co. It makes a pleasant preparation and they take it readily. Saline drinks of citrate of potash are cooling, grateful and beneficial. The nasal passages may be washed out when necessary, with carbolic acid injections.

Look out for complications, and treat them as they appear. For suppression of urine, apply hot poultices, fomentations, etc., over the loins. Dry cupping sometimes does good. Stimulate, when the vital functions begin to flag. When laryngeal complications set in, an emetic may give temporary relief. Some of the morbid products are got rid of, and breathing will be performed more readily for a time. To prevent suffocation, laryngotomy or tracheotomy may be performed. The former is more suitable for adults, the latter for children. Temporary relief is thus afforded, but recovery from this condition is rare.

During convalescence, a change of air and surroundings is highly beneficial. Diet should be healthful and nutritious, with a sufficient amount of exercise to exhilarate, but not to tire. Tonics of iron, quinine, strychnia, mineral acids, etc., are valuable during this stage.

NOTE.—Out of 19 cases treated in this way during the last four months, 17 recovered. Several of the cases were of a malignant type. In severe cases, inhalations of the vapor of hot water and slaking lime is *most valuable* and should never be omitted—repeated, at least, every half hour. Both fatal cases were children, about 4 years old. One

had an insidious form of the disease and was not placed under treatment until far advanced; the other persistently refused all treatment—so that in neither case was there any chance. These facts are offered for what they are worth, as tending to show that, with the strict carrying out of this line of treatment, the mortality of this fearful disease can be reduced almost to a minimum.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

BY D. LESLIE PHILIP, M.D., BRANTFORD, ONT.

(Read before the Brant Medical Association, Dec. 6th.)

Phthisis is now being treated with reported success by the continuous inhalation of the vapor of carbolic acid or other antiseptic agents by means of an almost constantly worn respirator.

"It is fair to infer says the *British Medical Journal*, that the application to internal suppurating surfaces of an agent which has been used in similar cases externally with such benefit, will be equally efficacious in checking the growth and development of morbid germs, and thus allow tissues to be reconstructed." Recent researches on tubercular disease and the nature of tubercle have excited great attention, and the teachings of some of the German pathologists, notably Virchow, are subversive of what we have been taught regarding its nature, and especially with regard to the relation which it sustains to inflammatory processes, some of the leading pathologists maintaining the view that the inflammatory process is primary to tubercle, and utterly denying the tubercular nature of many of the processes engaged in phthisis pulmonalis. Without attempting to give the views recently enunciated by them in this extensive field of enquiry, I would like to direct the attention of the Association to a new method of treatment with which we are more immediately concerned, and which has been used with a considerable degree of success during the past year, by Dr. G. Hunter McKenzie, of Edinburgh, judging from the published report of his cases. He was probably led to adopt this method of treatment from the views recently set forth as to the septic and eminently contagious character of tubercle—I allude to the inhalation of the vapor of carbolic acid or other antiseptic agents for lengthened periods, as

practised by that gentleman with apparently highly beneficial results. The inhalation of vapors in lung diseases has long been practised, but the mode of administration has been so defective that the practice has to a great extent fallen into disuse. It has also been adopted by advertising charlatans, in an imperfect way, and has thus helped to bring it into undeserved disrepute with the profession. It is now, however, as a rational method of treatment, extensively employed by leading and eminent medical men with, no doubt, the happiest results.

Late investigation goes to show that phthisis pulmonalis is eminently contagious, and may be propagated by direct infection from man to man. Without stopping to narrate the proofs for this assertion, which I think are conclusive, it may be stated that phthisis pulmonalis is now regarded as a disease of septic parasitic origin, and readily infectious under certain conditions. Dr. Pollock, sen. physician to the Hospital for Diseases of the Chest, Brompton, in writing upon Phthisis in relation to Modern Pathology, says: "Tubercle is then not an essential element in the disease, but where found is a secondary superadded result, arising from infection or the resorption of inflammatory results in the individuals themselves. Tubercle is a short-lived product, arising from inflammatory residua which have undergone degeneration—caseation—and been conveyed into the system or to distant parts of the lung or other organs by the blood-vessels and lymphatics, or even directly by the air-tubes. Tubercle probably lives but some weeks or months, but the changes in the lung formerly ascribed to tubercle, may last for years."

Professor Charcot, in the study of the thermometry of the disease, says: "The thermic curves are not those of inflammatory action but of putrid infection, and in the pyrexial form of phthisis, the exacerbation (of temperature) is due not to a pneumonic process, but to resorption of softened material."

If this pathology be correct, the antiseptic treatment is a rational one, and indeed the success already met with in their treatment of certain forms of phthisis after this method, by Dr. McKenzie, Dr. Max Schuller and others, should secure for it an extended trial. In order to carry it out effectually, Dr. McKenzie has devised a very ingenious little instrument which he calls the "Naso-oral respi-

rator" which covers both the mouth and nose, and can be worn for hours at a time without the least inconvenience. The perforated lid upon the lower part of the instrument can be removed at pleasure, and a sponge saturated with carbolic acid, creasote or other volatile antiseptic agents placed within. The air in the respiratory process passes through the sponge saturated with the vapor. It is provided with inspiratory and expiratory valves, and is not liable to get out of order.

The following are the brief notes of a case which I have recently treated after this method:—Miss S., age 24, of good family history, consulted me about six months ago, complaining of general debility, cough which had been troubling her for some time, slight progressive emaciation, loss of appetite, shortness of breath upon exertion, &c. I did not make any physical examination of the chest at the time, but prescribed for her cod-liver oil with the hypophosphites which she continued to use for some weeks with benefit. I did not see her again until the 2nd of September last, when I was sent for, as she had on that morning an alarming hæmoptysis. She must have got up fully a pint of blood. I immediately ordered her to bed, enjoined perfect quietude, and gave her fluid extract of ergot and iced drinks. Upon visiting her in the evening I found that the sputum had been occasionally tinged with blood, pulse 112, temperature 102. Upon examination of the chest I found a diffused crepitant *rales* over the superior portion of the left apex, which led me to infer that the hemorrhage had come from this portion of the lung. The history of the case for the next fortnight was unfavourable—afternoon exacerbation of fever, cough troublesome, sputum now and then tinged with blood. I now caused her to inhale continuously the vapor of carbolic acid and creasote, equal parts, by means of the respirator which I had some time since procured from Edinburgh, and after the manner prescribed by Dr. McKenzie. On an average she continued to use it from eight to twelve hours a day for the next two months, with, I think, markedly beneficial results. Her improvement appeared to go on from the period when she began using it, and at the present time though not strong nor robust, she is in a better condition of health than she was formerly; appetite good, very little cough, and the only abnormality I can detect upon auscultation

is slightly prolonged expiration over the left apex. She can take a good long walk without fatigue, and says she feels better than she has done for months back. She still continues to use it for a couple of hours morning and evening each day. The antiseptic treatment is of course to be employed with appropriate constitutional remedies; in this case, however, I used none, partly because she had previously taken a considerable quantity of cod-liver oil, and had a very decided aversion to its use in any form, and I also wished to observe the effect of the antiseptic *per se*.

Should the employment of the antiseptic be local or constitutional? Dr. McKenzie says: "My therapeutical experience leads me to believe that, as shown by Matthews Duncan to be the case in some examples of puerperal fever, it is more frequently a condition of *sapremia* than *pyemia* which obtains in phthisis, that the toxemia is rather attributable to the chemical factors which putrefaction engenders than to the presence of micrococci in the tissues and blood. I therefore think that it is only by the local application of the antiseptic that good results can be obtained."

These instruments, as devised by Dr. McKenzie, may be obtained from Mr. Mills, Chemist, Brantford.

CURIOUS CAUSE OF ANEURISM.

BY J. ALGERNON TEMPLE, M.D., M.R.C.S.ENG., ETC.
(Prof. of Obstetrics, etc., Trinity Medical College, Toronto).

On the 6th of June, 1881, a young woman, æt. 24, consulted me for pain in the left knee. Six weeks previously, on going up stairs, she was seized with sudden pain in the left knee. As the pain continued for some days after, she, thinking it was rheumatism, got a liniment to rub the joint with, which however gave her no relief. At this time she did not notice any swelling. Two days before consulting me, she perceived on getting out of bed that her knee was swollen. On examination I detected a uniform swelling occupying the inner side of the lower part of the thigh, about three or four inches above the joint. This was pulsating, a distinct bruit was easily detected with the stethoscope, and by pressure on the femoral artery both the pulsation and bruit ceased. This leg measured two inches more in circumference than the

right one. Recognizing the case to be one of aneurism I advised her to go at once to the hospital; she did not do so, however, for three or four days, during which time the tumor had considerably increased in size and was very painful. After her admission to the hospital a consultation was held, and there being no doubt as to the nature of the tumor, it was decided to try the effect of digital compression, which was faithfully maintained for 32 hours, by a number of medical students, who kindly volunteered their services. At the end of this time both pulsation and bruit had entirely disappeared, the leg was kept quiet in a semi-flexed position, and for four days neither pulsation nor bruit could be detected, but it gradually returned, accompanied by pain and increased swelling, which extended upwards on the thigh. As it was evident something more was necessary, a consultation was again held, and it was determined that I should cut down on the diseased vessel and ligate both ends. The patient, however, being influenced by her friends, most positively refused to submit to any surgical operation whatever, notwithstanding that I told her she must die unless she submitted to an operation. The case grew worse from day to day, and on the 2nd of July gangrene made its appearance in the foot, gradually extended up the thigh, and she died on the 6th of July.

Post-mortem.—An examination of the parts involved was made 24 hours after death. On cutting into the diseased leg a large quantity of both fluid and clotted blood was found everywhere throughout the muscular structures. A large aneurism of the femoral, where it becomes the popliteal artery was found, with a small punctured opening in it, and a quantity of organized blood clots round the opening. From the posterior and upper part of the inner condyle of the femur a spiculated outgrowth of bone was found, measuring $1\frac{1}{2}$ inches in length and terminating in a sharp point. Strangely enough we found that this sharp point had penetrated the sac and was the cause of the infiltration. It was also in all probability, primarily the cause of the aneurism by injuring the coats of the artery.

SEA-SICKNESS.—Bromide of sodium taken for several days prior to embarkation is the latest remedy for sea-sickness.

COLLEGE OF PHYSICIANS AND SURGEONS, QUEBEC.	
The following is the new Tariff of fees recently adopted by the Board of Governors of this college.	
The items represent the maximum fees to be charged for services rendered : —	
Visits from 8 a.m. to 9 p.m., not exceeding ½ mile.	\$ 2 00
Visits from 9 p.m. to 8 a.m., not exceeding ½ mile, not to exceed	4 00
Visits, each additional mile, in daytime.....	50 ¢
" " " " at night.....	1 00
Detention " a whole day.....	20 00
" " " " night.....	52 00
Ordinary office consultation, with prescription	2 00
" " " " " " night.....	3 00
Consultation, with special examination	5 00
" " with a practitioner.....	5 00
" " by letter between practitioners.....	10 00
Ordinary certificate of health.....	5 00
Special certificate, attested with report.....	8 00
Certificate, with report on disease and death.....	5 00
Post-mortem examination, external.....	5 00
" " " " with sectio cadaveris....	10 00
Ordinary case of midwifery (subsequent attendance extra).....	15 00
Turning, application of forceps, extraction of pla- centa (subsequent attendance extra).....	30 00
Miscariage, premature confinement (subsequent at- tendance extra).....	15 00
For attendance with a midwife, in all cases the charge is the same as for delivery	
Catheterism, ordinary cases.....	3 00
" " each subsequent operation.....	1 00
Vaccination, bleeding, extraction of teeth, hypoder- mic injection, etc.....	1 00
Introduction of stomach-pump.....	5 00
Application of cupping-glasses, leeches, setons, moxa, plugging, etc.....	5 00
Chloroformization, or other anæsthetics.....	5 00
Setting fracture of the thigh.....	25 00
" " leg or arm.....	20 00
Reducing dislocation of thigh.....	50 00
" " leg or arm.....	25 00
Amputation of the thigh.....	100 00
" " leg or arm.....	50 00
Operation for strangulated hernia.....	100 00
Reduction of hernia by the taxis.....	25 00
Lithotomy, or lithotritry	200 00
Ovariectomy	500 00
Tracheotomy.....	50 00
Operation for cataract.....	100 00
Extirpation of the breast.....	50 00
" " tonsil.....	10 00
Amputation of fingers or toes.....	10 00
Capital operations, not already specified.....	100 00
Minor " " " "	25 00

L. LARUE, *Registrar.*

Reports to the State board of health, Lansing, by 63 observers of diseases in different parts of the

		Number.	Per cent.
1	Intermittent fever (ague).....	54	86
2	Rheumatism.....	49	78
3	Neuralgia.....	44	70
4	Consumption of lungs.....	44	70
5	Bronchitis.....	43	68
6	Tonsillitis.....	40	63
7	Remittent fever.....	32	51
8	Typho-malarial fever.....	32	51
9	Diphtheria.....	28	44
10	Influenza.....	27	43
11	Pneumonia.....	26	41
12	Diarrhoea.....	24	38
13	Typhoid fever (enteric).....	20	32
14	Whooping-cough.....	14	22
15	Erysipelas.....	13	21
16	Scarlet fever.....	9	14
17	Membranous croup.....	8	13
18	Dysentery.....	7	11
19	Inflammation of bowels.....	7	11
20	Cholera morbus.....	5	8
21	Cerebro-spinal meningitis.....	3	5
22	Small-pox.....	2	3
23	Jaundice.....	2	3
24	Cholera infantum.....	2	3
25	Puerperal fever.....	2	3
26	Inflammation of brain.....	2	3
27	Continued fever.....	1	2
27	Conjunctivitis.....	1	2
28	Pharyngitis.....	1	2
29	Bright's disease.....	1	2
29	Spasmodic croup.....	2	2
29	Diphtheritic paralysis.....	1	2
30	Cancer.....	1	2
31	Laryngitis.....	1	2
31	Measles.....	1	2

The regular quarterly meeting of the society was held in Brantford, on the 7th of Dec., '81. The members present were :—Drs. Griffin, Philip, Harris, Kitchen, Clarke, and Winskel. The following gentlemen were elected officers for the ensuing year :—Dr. Kitchen, St. George, president ; Dr. Sinclair, Paris, vice-president ; Dr. Harris, Brantford, secretary-treasurer.

A paper was read by Dr. Philip on the "Antiseptic Treatment of Phthisis," and notes of a case of "Latent Typhoid Fever," by Dr. Harris. A long and interesting discussion took place, by all the members present, on these two papers.

After some routine business the society adjourned, to meet again at Brantford on the first Tuesday in March, 1882.

PROVINCIAL BRANCH MEDICAL ASSOCIATION.

A number of medical gentlemen from the neighbouring counties of Bruce, Grey, Huron, Perth, Dufferin, and Waterloo, met in Palmerston on the 1st of December, 1881, for the purpose of organizing a Medical Association. After some consultation it was agreed to form an Association, and that it be known as the North-Western Branch of the Ontario Medical Association. It was further determined to hold the next meeting of the Association in Palmerston on the 15th of February, 1882.

Selected Articles.

CEREBRAL SOFTENING.

BY PROF. WM. A. HAMMOND, M.D.

Case 3.—The patient was a German, fifty-eight years of age, powerfully built and healthy looking. He was accompanied by his two sons, from whom the following history was obtained: He had always enjoyed good health up to last fall, except that some years ago he had chills and fever; and four or five years ago he had an attack of rheumatism, and another about two years since. At that time the pain was chiefly in the chest and one arm which was swollen. The troubles from which he is now suffering date from September 17th, 1880. On the preceding day he had been on a little spree as was his custom once or twice a month. However, he never became so drunk but that "he could always navigate." On the morning of September 17th, just after getting up, he was leaning against the barn, and talking very excitedly to another man, with whom he was exceedingly angry. Suddenly he felt sick and dizzy. He was immediately assisted into the house and placed upon the sofa. By this time he had nearly lost consciousness, and had only enough sense to tell what had happened. It was then noticed for a moment that his head was drawn around toward his right shoulder. A spasm of the facial muscles followed, and he then went off into a regular epileptiform convulsion. He had five of these epileptiform

spasms in succession. For the next two or three weeks he remained sick; and during this time he had to be fed, because he had lost the control of the muscles of the hand, so that he could not find his mouth with his spoon; and he would grasp his fork and other articles upside down. There was, however, slight, if any paralysis of the right hand. Since then he has been troubled with sleeplessness at night, and some shortness of breath, but has had no more convulsions.

The principal symptoms which he at that time presented are those which he still manifests. These Prof. Hammond endeavoured to bring out more vividly, by a personal examination of the patient.

He first asked his name. The reply after some hesitation was, "Johnny," "Sonny," "I am all over." "I didn't say," "Schordie," "George," and other such unmeaning words and disconnected phrases. When asked where he lived, he would only say, "See over there," "Some over there," and other unintelligible sounds, which could not be called words. His son said that his name was George, and that his home was in Westchester. When asked his son's name, which is John, he answered, "I know, but can't," and so on. Next a question in German was asked, "Schlafen sie wohl?" but this he did not seem to comprehend any better than the rest. When asked if he had any pain in the head he replied, "I cant." "No." But his son said that he had always before told him that he did have pain there. Whenever the patient tried to speak, his tongue seemed to go automatically, and to be entirely beyond his control. He also seemed scarcely able to appreciate the meaning of what was said. On examining the top of his head a large encysted tumor was found, which his son said had been there for years, but was growing gradually larger. It was caused by a blow from a stick, or club, and so had no connection with the present disease.

The examination being finished, Prof. Hammond now said, that he had first seen the patient two weeks ago at his office. He could then talk little or none; but since that time he had been under treatment, and was now considerably improved. He seems to know people whom he sees, but he cannot tell who they are. His speech is inarticulate, and he cannot remember names. He, therefore, has aphasia, in both its amnesic and ataxic form; and here it is due to the shutting off of the blood from a part of the brain, probably, by an embolus. He has lost the memory of some words, and the ability to pronounce others, especially nouns. But some words he can pronounce, thus showing that there is no paralysis of the tongue. Moreover, he can neither read nor write, and so has ataxia and agraphia; and he probably could not express what he means by gestures, any more rationally than by words.

In reference to such cases as the present, Prof. Hammond continued: There are two varieties of cerebral anæmia, the partial and the general. Partial cerebral anæmia may be caused by the cutting off of the circulation from a portion of the brain, as by an embolus from a distant part, or by a thrombus formed in one of the cerebral arteries, by the coagulation of the blood at some point where the internal coat of the artery has become roughened. This clot keeps back the blood from the parts of the brain which are normally supplied by the artery, and as a result of the failure of nutrition, softening of the brain substance follows. Or again, rough surgical handling of an aneurism, or an operation on it with an electrical needle, may cause a small portion of the clot to be broken off, and this becoming lodged in some small cerebral artery, may plug it, and thus form an embolus. The most common way for an embolus to form, however, is by the detachment of a heart clot; as the case of this patient illustrates.

Partial cerebral anæmia, due to an embolism, may be ushered in by any of the following symptoms: The patient is perhaps standing quietly, when suddenly he staggers and falls, and, it may be, loses consciousness. He is now, probably found to be completely paralyzed on the right side, and is also aphasic. This is the worst form, and may be followed by death in two or three days. Or, in another class, a man in perfect health may suddenly lose the faculty of speech, and not be aware of it until he attempts to talk. Again, the only symptom may be a slight paralysis of the hand and arm. The mental phenomena in any of these cases may vary from a temporary derangement of the mind to a profound coma.

Other symptoms may follow the first attack. The patient does not recover, but after three or four days he is still found to remain paralyzed and aphasic. He may continue thus, or with slight improvement, for weeks or months, and then a second attack may occur, by reason of the detachment of another clot from the heart; and in this or subsequent attacks the shock and mental disturbance will be so great, as to cause a coma which will become constantly deeper, until terminated by death. If the embolus be quite small, only slight symptoms may follow, from which the patient will in time recover.

When the physician is first summoned to a case presenting any of the above conditions, his first duty is to inquire into any of the antecedent circumstances and history of the patient. For, in the first stage, it is sometimes very difficult to distinguish this from cerebral hemorrhage. But the clinical history will decide this point. If there have been previous attacks of rheumatism or heart disease, this should arouse suspicions of embolism.

The connection between rheumatism and cerebral embolism is this: Rheumatism is a disease

which tends to affect the fibrous tissues of the body. The internal lining membrane of the heart is one of these. When this becomes affected its surface roughens, and then the fibrin becomes detached from the blood as it passes through the heart, and small clots are thus formed on the walls, chordæ tendinæ, or valves. The fibrin is here separated from the blood, in the same way as it is done outside of the body when it is whipped with wisps of a broom. The heart clots thus formed may vary in size from that of a mustard seed to that of a large pea. If one of these from any cause becomes detached, it passes along in the circulation, and may finally be stopped in some small artery of the brain, and there form an embolus, which will give rise to any of the symptoms already described.

A patient first seen in one of these attacks presents a striking condition, and one about which little was known until within the last twenty years; and even now, the profession appears to know but little about it. These attacks were often called apoplexy, and whenever there was paralysis due to cerebral disease, but with no loss of consciousness, it was called a paralytic stroke. Nothing of the relation of these cases to rheumatism and heart disease was then known. But even now it is sometimes quite impossible to diagnose this from cerebral hemorrhage; for a man may have an embolus without a previous history of rheumatism or heart disease; and again, he may have such a history and still have an apoplexy, and not an embolism. But though the character of the disease cannot certainly be determined in the first stage, yet as it advances other elements appear which will settle the diagnosis. If it is cerebral hemorrhage, there will soon be developed contractions in the paralyzed muscles, especially in the hand and arm. The hand will be turned inward, and the forearm semiflexed on the arm, and held across the chest as if supported in a sling; and the legs will become stiffened and have a peculiar swing in walking. In these cases also, the paralysis is usually confined to the right side, and is accompanied by unconsciousness at the onset of the attack.

The remote cause of the disease is generally rheumatism, but the exciting causes are various. It may be rage as in the present case. An embolus might not become detached for many years, if there was no exciting cause. Anything that increases the force of the blood current, or excites the heart, may bring on an attack. Such as a blow on the chest from a fist, or any strong muscular exertion, such as wrestling, lifting heavy weights straining at stool, or the efforts of child-birth, and even the act of stooping down, as in lacing a shoe. However, any of these same causes may also excite cerebral hemorrhage, because they increase the blood tension in the vessels of the head, and so lead to their rupture.

We now come to the rationale of this condition.

It will be noticed that paralysis, if present, is almost invariably on the right side only, and that it is accompanied by aphasia. The location of the lesion is therefore, in the left hemisphere of the brain. This is easily explained when we consider the arrangement of the arteries, as they are given off from the arch of the aorta.

It will be seen by this diagram, that as the current of the blood passes out of the heart, carrying with it a detached clot, it rushes by the coronary arteries, which are now closed by the auricular valves, and the embolus is driven along the upper curve of the aorta, and passes by the innominate artery, the opening of which is in such a direction, as not to be likely to stop and draw in the clot. When, however, it reaches the left common carotid, which opens into the aorta at nearly a right angle, the current tends to rush directly into this, and the clot is stopped before it can get by, and is drawn in. It now tends to follow the most direct course, and so passes by the external carotid, which leaves the bifurcation of the common carotid at a slight angle, and flowing up the internal carotid, it goes as far as possible without obstructing a vessel. If the clot is very large it may plug the common carotid, but if not, its most direct and natural course is toward the middle cerebral artery. Here it may be stopped at the junction of the two arteries, or it may pass on into the middle cerebral, or if not too large, into one of its smaller branches, and there form an embolus. The severity of the symptoms following will depend principally upon the size of the vessel which becomes thus plugged. The blood is in this way shut off from that part of the brain which is supplied by the obstructed artery, and its tissues become softened and degenerated, and breaks down, and is destroyed. This is the commonest cause of softening of the brain. If only a very small vessel is plugged, loss of speech may be the only symptom.

Thus Trousseau mentions the case of his colleague, who was reading, and when he for some reason attempted to call his servant, he unexpectedly found that he could not speak a word. But it rarely occurs that there are not other symptoms besides aphasia. However, if speech alone is lost, the seat of the obstruction and the part of the brain involved can be determined quite definitely. The location of the faculty which controls the faculty of speech is now known with considerable certainty. It was formerly supposed to be situated in the posterior part of the third frontal convolution, but recent investigations tend to show that it also includes the island of Reil, and probably the anterior part of the temporal lobe. It is almost universally located in the left hemisphere of the brain. There seems to be in most individuals a predilection to use the right hand principally, and this preference appears to be inborn. But aphasia

due to a lesion on the right side of the brain, is proportionately about as frequent as to find left handed people. This indicates that the left hemisphere is exercised more constantly than the right. Accordingly, we find the left side of the brain larger, and better supplied with blood, and developed earlier in life, and having the advantage generally over the right. This increased nutrition of the left hemisphere predisposes to a more constant use of the muscles of the right side of the body. But in men who use the left hand in preference to the right, the right side of the brain is found to be the better developed. So if a left-handed man should have an embolus in the right middle cerebral artery, he would still be aphasic, because the centre of speech in him would be located on the right side.

The patient here to-day has aphasia, with only slight paralysis of the right hand. The mildness of the symptoms shows that he has only a small embolus probably, which plugs the arterial branch going to the speech tract on the left side. There are two varieties of aphasia. In one, the amnesic, the patient loses the memory of words, and consequently cannot express himself, though he may know what he wants to say. In the other, or ataxic variety, he knows what words he wishes to use, but cannot pronounce them, because of his inability to coordinate the movements of his tongue; and the result of his efforts is a confused mixture of unintelligible and disconnected words.

There has been much discussion as to the way in which improvement, or recovery of speech, takes place in these cases. It is probably by one of two means. Either the collateral circulation is restored, by means of anastomosing capillaries, or some other part of the brain assumes the functions of the diseased portion. Some observers deny the possibility of there being any collateral circulation, for they say the arteries of the brain do not anastomose, except by the circle of Willis. But for us clinical experience should be more of a guide than speculations. We know that patients do slowly recover their speech; and if there is no nutrition of the part of the brain where the speech centre is located, there will be death of the tissue of this part, and consequently no speech. There is no good authority for believing that there can be a vicarious action of one part of the brain for another; yet many believe this to be the solution of the difficulty. The truth is, probably, that the part is nourished by a collateral circulation. This is probably the cause of the improvement in the patient before us. There is a theory that the embolus undergoes fatty degeneration and finally becomes absorbed, and thus the obstruction in the circulation is removed, and the diseased portion becomes revitalized. This is possible, but doubtful.

Treatment.—All patients of this class, if they re-

cover from the first attack, and do not die from coma, should be treated as this man is now being. The indication is, to improve the nutrition of the brain. There are some things which are thought to do this. Blisters are sometimes applied to the head, but this is absurd. Blistering cannot open a plugged vessel, and thus restore the circulation. Yet not long ago a patient in this condition was seen by me, and the attending physician had administered large doses of iodide of potassium, and applied blisters to the head; but neither of these means are of any use. They may draw the blood to that portion of the head until it meets the obstruction, but it must be remembered that the anæmia is beyond the clot, and in front of it there is already congestion, which is thus being increased and so doing more harm than good. The one great and grand thing to do when the patient is seen in the first stage of the attack is, to *let him alone*. Merely keep the head slightly elevated and cool, and there stop. Later on, after the active symptoms of irritation, such as muscular twitchings and convulsions, and the general prostration, have passed off, then the head should be kept warm, at an equable temperature, but not hot, so as to facilitate the flow of blood to the part. Otherwise simply carry out whatever indications may arise, such as drawing off the water, if the bladder is paralyzed, or administering a cathartic, if there is obstinate constipation. The diet should be nourishing and simple, and the habits regular. But if the strength continues to fail, and there appear symptoms of heart weakness, the question as to whether stimulants should be given then arises. When such a crisis comes there is only one thing to do. Alcoholic stimulants must be administered carefully, in small and repeated doses, and the effect closely watched. So the patient should be tided over the dangerous period, until the vessels can recover their normal relations. But after all active symptoms have disappeared, something should be done in the way of trying to improve the nutrition and power of the brain. Strychnia and phosphorus seem to have such an influence. One-tenth of a grain of phosphate of zinc and one-third of a grain of nuxvomica may be given at a dose. The following is the usual formula:—

R. Zinci phosphatis,.....gr. ij)
Ext. nucis vomicæ,.....gr. x.
Fiat pilulæ xxx.

Stc.—One pill three times a day.

This has been the treatment of the present patient for the past two weeks, and as he seems to be improving it will be continued.

In cases where there is still some paralysis, galvanism, or electricity in some other form, should be applied to the affected muscles, and at the same time they should be exercised by passive motions, rubbing hot applications, and so forth. If, in the first stage, the patient feels chilly, or cold, from the

shock, the temperature of the body may be kept up by hot applications or other means

Much may be effected in trying to reteach these patients to talk, by repeating to them often those nouns and names which they seem especially to have forgotten. They usually forget the names of persons, and of the commonest things, as this patient illustrates. When a watch is shown him he calls it a "ring post," a "boot," and "news-boys." A pencil he calls a "capie." A hat is "John," and so on. Now if you try to make these people talk, by patiently teaching them to use the commonest words, mostly names of things in a short time they will be found to have a vocabulary which will be very serviceable to them. An example of this fact is that of a lady patient of mine, who when I first saw her could only repeat over and over one single phrase, but after six months of education, she could use correctly three or four hundred words. This is quite a gain, when we consider that most of us, in our ordinary conversation, probably make use of only about one thousand different words in a year. This man should be taught in this way, for some time each day, and he will probably continue to improve in his talking, as he has done within the past two weeks.

Notes on Case 3.—The review of this case suggests the thought: How is it, that the faculty of speech is sometimes restored after aphasia has once existed? In answering this, the question arises, as to whether the so called speech centre is really the source from which impulses are carried directly to the organs of speech, or whether the true course is not in the corpus striatum beneath, to which impulses are transmitted from the cortex. Experiments seem to point rather to this latter being the true condition. The gray matter of the cortex is then thought to have rather an intellectual function, and merely originates ideas, and then stimulates the special centre beneath to carry them out. Now, if this be the case, we must search here in the corpus striatum for the source of both amnesic and ataxic aphasia, which occur when the speech area is injured or destroyed.

If the gray substance of the convolutions in the speech region is the source of the intellectual ideas relating to the memory of words, it is evident that obliteration of this portion will be followed by forgetfulness of what words to use in order to express ideas which may have originated in some other portion of the cortex. So we find the amnesic patients have ideas about things which they cannot remember words to express.

But when we come to explain the cause of ataxic aphasia unaccompanied by the amnesic variety, we must bring in another element, the existence of which, experiments have apparently demonstrated namely, that there appear to be so-called sensory areas in the brain, which, if affected, interfere with

or modify impressions which are normally transmitted to the brain by the sensory nerves, or which originate in the mind itself. Thus there appear to be visual, auditory, tactile, and other sensory areas or centres. And if the visual centre, for instance, were destroyed, though impressions would still be carried through the uninjured optic nerve, yet there would be no consciousness of a perception in the intellectual portion of the brain.

In a similar way the inability of the perceptive portion of the cerebrum to determine in what condition of contraction or relaxation any of the muscles of the body are without the aid of other senses, will account for the lack of coordinating power over these muscles when the tactile centres are involved in the disease. So in the ataxic aphasia, the inability to control the movements of the tongue may be due to partial or complete paralysis, and hence blunting of the sensibility of the tactile nerve centre of the brain which receives impressions from the muscular fibres of the tongue; and this prevents the patient from knowing in just what condition of contraction the muscles of the tongue are at any given moment. So that if he starts to speak and puts his tongue into position to pronounce the first syllable of a word or sentence, when he wishes to change its position, so as to pronounce the second and following syllables, it moves about automatically, and is most likely to pronounce those words to which it has become most accustomed. This action is similar to that seen in the walk of a drunken man or one afflicted with locomotor ataxia, who may not be able to coordinate the muscles of his legs, simply because the muscular sense, or tactile sensibility of his legs and feet, is blunted, so that he does not know, from the impression made upon the terminal nerves, in what condition of contraction his muscles are. And if he attempts to walk without the aid of his eyes to help him determine the position of his limbs, he will stagger about and put his legs into as indefinite and peculiar positions as the man with ataxic aphasia will his tongue in pronouncing unmeaning and disconnected syllables.

So we conclude, that where there is ataxic aphasia the destruction of brain tissue from disease has involved the tactile area for the tongue, which is probably located in some portion of the speech area. It is thus easy to see how both forms of aphasia may be present simultaneously, if the disease be so extensive as to involve the whole of the region of speech.

We are now prepared to consider how it is possible for speech to be partially and gradually restored in these cases. There can be found objections to every hypothesis heretofore advanced to account for this. It seems, however, that the following explanation has something at least, to commend it.

We have seen that the lesion is generally on the

left side only of the brain, while the other side is still intact. Now because we have found that the "centre of Broca" on the left side is principally concerned in speaking, it does not follow that the same centre on the right side has not also been partially educated to assist the left, any more than the education of the motor area for the right hand and arm has been carried on to the total neglect of the corresponding area of the opposite side. And we know that when a man has lost the use of his right hand and arm, from paralysis or other cause, he can educate the left hand, so that it may ultimately become as skillful as the right. So it appears at least possible that the partially educated speech area on the right side of the cerebrum may gradually be educated to assume the functions hitherto performed by the left side. The fact that after a paralytic shock causing aphasia the patient still has an awkward and blundering use of words, though the left speech centre may be utterly destroyed, seems to point to the probability that the right side is attempting to perform the duties of the left, to which it is as yet unaccustomed. And just as a child may be slowly educated to talk, so these patients, by faithful teaching, will gradually regain the use of language.

An objection to supposing that the left area is gradually restored by a collateral circulation, and thus at last reassumes its accustomed function, is the fact that when an embolus or thrombus forms in an artery there is a stasis of blood throughout the whole neighbourhood of that artery, in the vessels supplied by it. And this stasis causes the coagulation of the blood and the extension of the clot throughout all these branches. Thus the arterioles become clogged, and they finally degenerate into mere cords, just as is the case where a ligature is tied round a small artery. Now these impervious cords can never again allow blood to circulate through them, and so it is difficult to conceive how there can be any collateral circulation where there is no means for the blood to pass into the diseased part. Furthermore, this view seems to be strengthened by the fact that, on post-mortem examination, the brain substance of this part is found to be softened, broken down, and frequently destroyed completely.

For these reasons, it seems more probable that the speech centre on the right side assumes the duties heretofore performed by the left. So it follows that efforts at education may be made with hopes of gradually restoring the lost faculty.—*Med. and Surg. Reporter.*

Mr. Erasmus Wilson, President of the Royal College of Surgeons, Eng., has received the honor of knighthood, in consideration of his numerous gifts to charities, etc.;

DR. FERRIER'S LOCALISATIONS.

In 1870, Fritsch and Hitzig published an experimental research on the brain, showing that the cerebral substance was not, as had been hitherto thought, unsusceptible of excitation; and they demonstrated, among other things, that electrical stimulation of the anterior parts of the brain produced movements on the opposite side of the body. Professor Ferrier laboriously and ably continued and extended these researches, and succeeded in ascertaining in a very exact manner that, in certain animals—dogs, cats, and monkeys—the excitation of certain definite and limited areas of the external cortical layers of the brain invariably produce certain definite movements on the opposite side of the body. In his earlier experiments performed on dogs, cats, and rabbits, (published in the *West Riding Lunatic Asylum Report of 1873*), he ascertained that the anterior lobes of the cerebral hemispheres are the chief centres of voluntary motion and active outward manifestations of intelligence; he defined and localised the centres for the movements of the eyelids, face, mouth, tongue, ear, neck, hand, foot, and tail; and showed that, in general, the action of the hemispheres is crossed, but that certain movements of the mouth, tongue and neck, are bilaterally co-ordinated for each cerebral hemisphere; that the corpora striata have crossed action, and are centres for the muscles of the opposite side of the body; that the optic thalami, fornix, hippocampus major, and surrounding convolutions, have no motor significance, and are probably connected with sensation; that the optic lobes or corpora quadrigemina, besides being concerned with vision and the movements of the iris, are centres for the extensor muscles of the head, trunk, and legs; and that the cerebellum is the co-ordinating centre for the muscles of the eyeball; and on the integrity of these centres depends the maintenance of the equilibrium of the body.

It would be difficult to overestimate the value and importance of these discoveries; but, when they were followed and confirmed, a little later, by similar researches on the brain of monkeys, the localisation of function in the human brain—having been deduced from the study of the homologous parts of the brain of the lower vertebrates, and the almost identical brain of the monkey—was removed from the region of probabilities to that of scientific facts. These researches, coupled with an immense amount of pathological data collected by Charcot, Pitres, Hughlings Jackson, and many others in all countries, have culminated in the establishment of a cerebral topography of localisation of function, which, though still disputed, and however much they may be modified by other researches, such as those of Goltz and Munk, must enter largely into the new physiology and pathology of the brain.

Briefly considered, the defined areas of cerebral localisation discovered and mapped out by Ferrier are as follows:—Most of the voluntary motor centres are grouped round the deep vertical fissure of Rolando, which passes from the summit of the hemisphere above to the horizontal fissure of Sylvius below; the convolution anterior to this fissure, the ascending frontal, contains, in its upper part, the centres for the complex movements of the arm and hand, and, in its lower part, the centre for the movement of the lips; the posterior half of the superior and middle frontal convolution is a centre for lateral movements of the head and eyes, with elevation of the eyelids and dilatation of the pupil; in the upper part of the convolution, which is behind the fissure of Rolando, the ascending parietal convolution, is the centre for voluntary movement of the lower limb, and lower down are centres for the movements of the hand and wrist; the posterior extremity of the third left frontal convolution is, as had been previously established by Broca, the centre of speech, and, as further demonstrated by Ferrier, the motor centre of articulation. Behind the ascending parietal convolution, in a spot called the supramarginal lobule, are the centres of vision; still more posterior is the centre of hearing; the centre of smell is located in the uncinate gyrus; near it is the centre of taste; and touch is located in the hippocampal region. Ferrier showed, moreover, that the optic lobes, or corpora quadrigemina, are not only closely connected with the function of sight, but are also the centres of equilibration and of certain emotional expressions; and that the cerebellum, while mainly concerned in the preservation of equilibrium, is also a centre for associated movements of the eye, and of various muscular adjustments which aid in maintaining the equilibrium of the body.

These are, briefly stated, the main results of Professor Ferrier's researches; and to the physiologist and physician they are, by mapping out the brain, as invaluable as a chart of an unknown region would be to an explorer.

It was not long before physicians and surgeons began to take advantage of these new data. They found in them an explanation of many of the pathological experiments practised by that arch-vivisector Nature; and discovered that some of the diseases of the brain hitherto considered incurable, were susceptible of amelioration, or even of cure. We will mention a few examples of the recent application of cerebral localisation to medicine, among a great number. A child (*Fall von Hirnabscess bei Courvoisier Correspondenzbl. schweiz. Aerzte*, No. 1, January 1st, 1879,) two and a half years old, had a slight fall on the left side of her head, to which, however, no importance was attached; a week later, the child was seized with vomiting, pain in the head, and paralysis of the right leg and arm, followed by ptosis and strabis-

mus; the next day there was complete right hemiplegia, with left facial paralysis and loss of consciousness. The paralysis pointing, according to Dr. Ferrier's localisation of functions of the brain, to injury or disease of a certain definite spot; the skull at this spot was, therefore, laid bare, and a depressed fracture was discovered. The piece of depressed bone was removed, giving exit to a quantity of pus; a consciousness and power of movement of the paralysed limbs returned a few hours after the operation, and the child eventually recovered. A man who had been struck on the left side of the head with a stone immediately became unconscious; and, on recovering consciousness, was found to have become completely speechless, or aphasic, without paralysis. Some time later, he came under the care of Dr. Hammond, of New York, (*Diseases of the Nervous System*, seventh edition, p. 209), who diagnosed from the symptoms fracture of the internal table of the skull and pressure on the posterior part of the third frontal convolution. The spot thus indicated by the localisation of the lost function of speech was trephined by Professor Sayer, and, as diagnosed, the internal table of the skull was found to be fractured and a splinter pressing on the convolution named. The fragment was removed; and as soon as the patient recovered from the ether, he spoke perfectly well. We will give but one case from a great number, of traumatic epilepsy. A child, aged 7, received a blow from a poker; it produced no external wound, and no scar or depression of bone remained. A year later, the child had an epileptic fit, and continued to have fits daily for about seven years, with occasional periods of exacerbation, at which time the fits increased to twenty or thirty a day. At the end of this time Dr. Ferrier was asked to see the child in consultation; tenderness was found over the right parietal region, with loss of power in the left hand, and indistinct utterance from loss of muscular power in the lips. Trephining was decided upon, and Dr. Ferrier pointed out that the seat for trephining should be rather low down, to correspond to the centres in the brain for the arm and lips, which seemed affected. This was done; for eight weeks after the operation, the child was free from fits, and though at the periodical exacerbations the fits returned, yet with always diminishing severity, (*British Medical Journal*, October 16th, 1880). These cases might be multiplied greatly. In the *Glasgow Medical Journal*, (September, 1879,) is reported a case of right hemiplegia and convulsions, due to tumor of the dura mater pressing on the motor centres of the left brain, diagnosed by aid of cerebral localisation, and cured by removal of the tumor. In *Brain*, (October, 1881,) in a case of left hemiplegia, due to abscess of the brain, the situation of which was indicated by knowledge of the motor centres of the paralysed limbs; the skull was trephined, and the abscess opened and

emptied, the patient ultimately recovering. Dr. Echeverria has collected 165 cases of traumatic epilepsy, of which 64 per cent. were cured by trephining, the site for the operation and the exact nature of the lesion being indicated by cerebral localisation.

But, apart from these cases of direct surgical interference, which, but for a just confidence which a knowledge of cerebral localisation gives, would be left to live or die equally miserably, the influence of exact knowledge of the brain is felt in the treatment of mental and nervous diseases. Time was, and not long ago, when insanity was looked upon by the physician, as it is now by the vulgar, not a disease of the brain-tissue, often capable of cure, but as an incomprehensible affliction of the impalpable mind, before which the physician and surgeon are therapeutically powerless. Thanks, however, to scientific research, brain-tissue has been found to be not only as capable of regeneration as many of the other structures of the body, but even more so; and stimulation, electrical and therapeutical, of degenerated centres of localised function may, and in fact often does, lead to recovery. In an interesting paper by Dr. Althaus, in *Brain*, (April, 1881), cases are given of the application of the constant current, with very happy results, to those parts of the brain which, from the symptoms considered in connection with cerebral localisation, were known to have undergone morbid change. This comparatively untrodden path opens a new vista of the cure of nervous diseases.

In therapeutical researches, also, the effort at the present day is to discover and define the localised action of drugs; and in this direction also the study of cerebral localisation opens out to us a fair prospect of being able to treat various forms of insanity and acute nervous diseases, due to local causes, on a rational basis. Dr. Ferrier's recent research on the localisations of atrophic paralysis—showing how atrophy of certain groups of muscles which are associated in action is due to localised lesions in the spinal cord—point the way to fresh improvement in the treatment of such lesions.

Indeed, the outcome of the minute and faithful study of the functions of the brain cannot be estimated, so great are the already achieved, and so much greater the probable benefits; so vast the importance of knowing the working of the great organ of the mind and centre of the movements and sensations of the body.—*British Medical Journal*.

M. BERGER advocates a method in skin grafting, of exciting the vascularization of the flap before cutting it, by covering the skin either with a mustard plaster or with warm poultices. He has already found this method to be successful.—*Brit. Med. Jour.*

RUPTURE OF THE PERINÆUM AND PROLAPSUS UTERI—THOMAS.

Ann R., aged forty years and a native of Ireland. She has had one child (six years ago) but no miscarriages, and is now a widow.

How long have you been complaining? "For about a year." How do you suffer? "From a great pain in my back." What else? "Pains in my knees, legs, and shoulders." Do you suffer much at your monthly periods? "No." Can you walk about pretty well? "Yes." Can you go up and down stairs well? "No." Can you do as much work as before you began to feel badly? "Oh, no." Have you any trouble about your bladder? "I have to pass my water too often." How many times during the night? "Only once or twice at night, but I have to pass it very often indeed through the day." You feel relieved in this respect, then, at night? "Yes." Do you have the whites? "Yes."

You observe that the patient has a very strong frame, such as we commonly associate with persons in robust health; but it needs only a glance to see that she looks harassed and depressed. As you have heard, she was well up to one year ago, when she began to suffer from great weakness and pain in the back and thighs. Then followed leucorrhœa and irritability. Such symptoms scarcely seem like those that could seriously affect a patient apparently so strong, and she herself does not make very much of them; but yet the fact remains that she cannot do her ordinary work any more.

Now let me show you what took place in this woman's case six years ago, and has really caused all her trouble, although she has been complaining only for the past year. Before the birth of her child her uterus was kept up in place by the ordinary means provided by nature for the support of this organ; but at the time of the delivery the perineal body was split directly in two, the rupture of the parts extending completely back to the anus. What was the result of this accident? Presently the bladder began to fall, because the laceration of the perinæum took away its entire support; and as it descended lower and lower, the uterus (which was in a state of subinvolution and greatly enlarged) came down with it. The patient's system bore up nobly under such a strain; but at last, at the end of five long years, it began to give out. The uterus has not as yet come down outside of the body in this case, but it has fallen down to the vulva; so that the fundus thus presses upon the bladder, while the rectum, on the other hand, is dragged upon.

Next we enquire, Can the symptoms, of which the patient complains, be satisfactorily explained by such a prolapsus uteri as we find here? and the answer is, "Undoubtedly they may." This

is in some respects a prolapsus of the second degree, because, for some reason, the uterus still retains its normal axis, instead of having become retroverted, as is generally the case. I presume that if nothing were done to prevent it the organ would, before a great while, come down entirely outside of the body; the ligaments having finally given up all resistance.

I wish to pause here for a moment to say, that any medical man who is in the habit of practicing obstetrics and ignores such an accident as rupture of the perinæum had better, by all means, give up this branch of the profession. All sorts of uterine troubles are constantly arising from it; and the most lamentable part of the matter is that they might all have been avoided if the accoucheur in attendance in each case had only performed his duty properly. Of course, rupture of the perinæum is sometimes inevitable, in spite of all our efforts to save it; but not infrequently the accident can be prevented by a little care. For instance, when forceps are employed it is better to take them off before the head is delivered. If by taking every precaution, then, we can prevent the perinæum from giving way, we are doing a vast deal for the patient's present safety, as well as for her future welfare. There are some who boast that they do not even tear the fourchette in delivering their patient; but as a fact it is found that this almost invariably gives way. Such a rupture, however, is physiological, rather than pathological, and it is not of this that I am speaking. More extensive lacerations of the perinæum are, unfortunately, very frequent, and, indeed, they take place in the great majority of instrumental labors. Of course, I do not mean that in the generality of forceps cases the perinæum is torn all the way through to the anus; but enough injury is done to give rise to very serious trouble. When we consider what an acrid and irritating fluid the lochial discharge is, it certainly appears marvellous that more parturient women do not die of septicæmia, because when there is a rupture of the perinæum, the raw surfaces are constantly bathed by this irritating material pouring from the uterus. Yet this is only one of the many evils that result from this accident.

Now suppose that, in some case, in spite of all efforts to prevent it, you find that there has been a rupture of the perinæum. The question at once presents itself, Shall I close it or shall I let it alone? While it is impossible to lay down any law that shall be universally applicable in such cases, the rule is, put in sutures immediately and repair, as far as it is possible, the damage that has been done. To this, however, there are some exceptions. When, for instance the patient has lost a large quantity of blood, or has otherwise become much exhausted during labor, or when there are weak-minded relatives present who will cry out with horror at the mere thought of such a proced-

ure, and nearly frighten the patient to death, it is better to delay the operation until a more appropriate time. If the patient has been bleeding very profusely, she may actually die while the sutures are being put in, and, of course, any obstetrician who attempts to operate under such circumstances must be regarded as culpable.

If done carefully and thoroughly the immediate operation is generally successful. Usually, however, the practitioner does not have the necessary appliances for operating with him, but it should be the rule of every one who practices obstetrics at all to always have the things required at hand in every case which he attends. When this is the fact he can put in the sutures without any delay, and if anæsthetics have been previously used during the labor, the patient very often is entirely unaware that any operation is being performed upon her. When a laceration has thus been promptly repaired you have closed up two avenues of future trouble to your patient. In the first place, you have prevented the exposure of the raw surfaces of the torn perinæum to the septic action of the lochial discharge, to which allusion has already been made. I often wonder why it is that all women do not die of puerperal fever after labor. As the patient lies on her back the septic fluid bathes not only the cervix (which is very likely to have been lacerated) and the vagina, but also pours directly over the fourchette whose lymphatics and blood-vessels have been exposed by its almost inevitable rupture. All this is going on for days and days together, and although vaginal injections may be of service, they cannot prevent it. How much greater must be the danger, then, when not only the fourchette, but perhaps nearly the whole perinæum, is torn through, and the extensive surfaces of its two parts left exposed. In the second place, by an early operation the necessary support is furnished to the uterus, and the danger of prolapsus in the future is averted. During the present course I have not had so good an opportunity as the present for speaking of this subject, which I regard as a very important one.

But now, as to the patient before us. Can she be cured? I think she can, but it will take a long time. Under the circumstances here present I would by no means advise that the treatment should be begun with a surgical operation. It is possible to restore this uterus to position and maintain it there by other means, and this will relieve both the engorgement which now characterizes it and the severe dragging upon the ligament which has been going on so long. For the purpose I would suggest Cutler's pessary or some modification of it (which might be removed at night), and in addition copious vaginal injections of hot water should be frequently used, while care should be taken that all pressure from tight clothing be removed. After three months of such treatment as this I do not

doubt that we should have a uterus much less hyperæmic and heavy than at present, and it would then be proper to restore the lacerated perinæum by an operation. The restoration of the perineal body would thus support the bladder, and all traction having been removed the uterus would probably remain in its normal position without the aid of a pessary or other mechanical contrivance.

SUPPURATION OF THE KNEE-JOINT, ASSOCIATED WITH PHTHISIS. AMPUTATION; RECOVERY, WITH DISAPPEARANCE OF CHEST SYMPTOMS.*

Charles W—, aged twenty-three, a footman, was admitted on May 12th, 1881, into Job ward under Mr. Bryant's care. In February, 1878, he jumped from a loft about ten feet, and at the time felt no ill effects. About ten days afterwards he became feverish and very weak; he perspired a good deal, and had a bad cough. For three months he kept his bed. In August he went into Canterbury Hospital, where he was told he had rheumatism in his knee. His legs were dressed with a spirit lotion, and in a fortnight he was discharged. For three months he was in good health; the swelling had entirely disappeared from his knee, which he was able to bend. His knee, however, soon began to swell again, and became hot and painful. In July, 1879, he was admitted into Guy's, when his knee was swollen and felt pulpy to the hand. It measured 14.25 against right 12.75. There was no fluctuation, but pain on pressure over the femoral condyles. There was then dulness at the base of the left lung. The knee was blistered and a posterior splint was applied. He was discharged August 27th, wearing a Bavarian splint to ensure immobility of the joint, and with an elastic bandage beneath it for purposes of pressure. He wore his splint for two months, when his knee being much better he discontinued it. He was then able to bear his weight on his leg and bend the knee, and so resumed work.

Six weeks ago he jarred his knee when coming down stairs. The accident caused him much pain and the joint in about two hours after swelled a good deal. He could, however, use the limb. The joint has since steadily grown worse. He has had hæmoptysis for the last three years, and a bad cough in winter. He perspires much at night.

On admission, May 12th, 1881, the knee was much swollen and displaced backwards, the tissues around being very œdematous. The joint was clearly disorganized. The man looked very ill and thin, and had a bad cough. There was dulness over both apices in front, and "cogged" inspiration

* Read before the Medical Society of London, Oct. 24, '81.

at both apices, but it was most marked on the left side. There was prolonged expiration and bronchial breathing at the left apex. Good resonance and vesicular murmur at the bases. He had had a good deal of hæmoptysis, and his expectorations were muco purulent.

June 7th.—Under chloroform his leg was amputated; an Esmarch bandage having been applied as a tourniquet after elevating the limb, antero-posterior flaps were made. The anterior one was made by a semilunar incision reaching to about two inches below the condyles. The posterior flap was made by transfixion. The bone was sawn through above the condyles. All the vessels were twisted, except one large vein, which was ligatured with carbolized gut. Great care was taken to stop all oozing, by the use of sponges wrung out with hot iodine water, that quick union might ensue. The flaps were brought together by silk sutures, one inch apart, strapping being applied in the intervals. The stump was washed with iodine water, and a drainage-tube put in. The wound was dressed with terebene and oil, and a stump put upon a posterior splint. The knee, on examination, was in an advanced state of pulpy disease. The joint was full of caseating pulpy material. The cartilage was removed from the external condyles, and the bone was covered with granulations. The opposing surface of the tibia was in a less advanced condition. The underlying bone was healthy. In places sinuses had begun to form. On the 13th, the sixth day after the operation, the stump was dressed for the first time, when union of nearly the whole length of the wound was found to have taken place. On the 14th, the patient was doing well. There was very little discharge from the stump. Temperature, 99.6°; pulse, 100. On the 17th, secretion had diminished in quantity. On the 21st, the fourteenth day after the operation, the drainage-tube was removed. Temperature 101.2°, probably due to constipation. On the 23rd there was only a granulating surface of about a quarter of an inch at the inner extremity of the wound. Union had taken place in the rest of its extent. Temperature 99°.—Chest examined: Right apex much improved since his admission. Good resonance over the right apex, and fair over the left, the only fault being a slight prolongation of the respiratory murmurs. Left side inspiration still clogged. Respiration still somewhat bronchial. At bases good vesicular murmur.

On July 14th the patient was discharged convalescent, and looking comparatively well. He had then no night sweats, and did not spit blood. The stump had healed well, except at the inner extremity of the line of union of the flaps, where there was a very small granulating surface.

Remarks.—I have thought this case worthy of being brought before the notice of this Society on account of the important practical point it illus-

trates—namely, the value of removing local suppurative disease, and more particularly bone or joint disease, when associated with lung mischief; and if it cannot be said in the case before us, from the want of lapse of time to enable us to form a positive judgment, that the organic disease which existed in the lungs at the time of the amputation had disappeared, there can be no doubt that it had become quiescent, and had apparently advanced towards cure; for when the man left the hospital all the local lung symptoms had ameliorated, and his general condition had greatly improved. It is to be noticed also that the wound after the amputation had almost entirely healed by quick or primary union. If I might venture to speak from my own personal observation, I am convinced that the presence of local suppurative joint and bone disease, if it does not primarily originate lung trouble, does much to aggravate it and hasten its progress; while the case I have brought before you, in addition to the experience gained by others which have passed under my care, clearly prove that by the removal of the local suppurative disease the lung mischief, which may have been previously progressive, is retarded, if not cured; the lung disease by its presence affording an argument in favour of operative action rather than of delay. Under these circumstances, it clearly becomes the duty of the surgeon to employ his art actively rather than expectantly, and to take away by no partial but by some decided operative measure any local suppurative disease which by its progress has been proved to be incurable by natural processes, or from its nature is likely to require much time for its repair. The case I have just read adds another to the list, which has been steadily lengthening, in which this practice has proved successful, and it will, I trust, encourage surgeons to carry out the line of practice it illustrates. In lardaceous visceral disease the same line of practice should also be employed.

ANIMAL LIGATURES.

The choice of a proper material for a ligature is a matter of serious import to the surgeon in the performance of plastic and other operations. It is well known what stress Marion Sims laid upon the value of the silver wire suture as affecting the success of the operation for the cure of vesicovaginal fistulæ. Various metal wires have been used, yet still the silver wire is considered as the most generally serviceable of all the metal sutures. But there are many cases in which metal sutures of any sort are inconvenient or inapplicable, and the attention of surgeons has long been turned to the search for a material for sutures that should better meet the indications than does silk, which

has been used probably more than any other material.

Of late, special attention has been paid to the matter of discovering animal ligatures which should be of sufficient strength and endurance to serve the purpose of ligating an artery, without danger of premature absorption allowing of secondary hemorrhage, and which should yet be absorbed after serving their purpose so as not to be a source of irritation.

Carbolized gut was proposed some years ago and has been used with more or less favourable results by a number of surgeons. The great objection to this ligature has been that it would take up considerable moisture from the vital tissues, soften, and become absorbed so soon that it could not be depended upon in circumstances which require that the ligature should remain firm for several days.

In the *Annals of Anatomy and Surgery*, of October, we note a paper by Wm. Macewell, M.D., of Glasgow, Scotland, in which, after discussing this subject at some length, he recommends as the result of his experiments, a preparation of gut by a prolonged immersion in a solution of chromic acid in water and glycerine. He found that by varying the proportions of chromic acid and glycerine, greater or less power of resisting absorption could be imparted to the gut. "By using a strong solution of chromic acid a gut was obtained which resisted the action of the living tissues for at least two months, and by a weak solution gut was prepared which softened in the tissues in a few days."

By a series of experiments he ascertained that to prepare a gut which will resist the action of the tissues for about two weeks and then soften and become absorbed, it should be kept for two months in a solution consisting of chromic acid, one part, water, five parts, glycerine, one hundred parts. It should then be washed and dried and placed in a solution of carbolic acid and glycerine 1-5. As the length of time taken to prepare the gut in this way is an inconvenience, he experimented farther, and has found that a gut can be prepared which will resist absorption almost as well as this by immersing it in a solution consisting of chromic acid, one part; water, five parts; and glycerine, twenty-five parts. If kept in this solution for four days, the gut will resist the action of the tissues for from five to eight days, and will answer for sutures in flaps or in plastic operations of various sorts.

Mr. Lister's method of preparing catgut ligatures, as given in his address before the Clinical Society of London, is as follows: He takes one part of chromic acid, 4,000 parts of distilled water and 200 parts of pure carbolic acid. Into this solution is placed catgut about equal in weight to the carbolic acid. At the end of forty-eight hours catgut steeped in such a solution is suffi-

ciently prepared. It is then taken out of the solution, dried and placed in carbolic oil, one-to-five, it is then fit for use.

Dr. Macewen calls attention to the necessity of having a good article of the thoroughly dried old gut in order to make a good preparation. The result of quite an extended use of these ligatures during the last three or four years has shown to his entire satisfaction that they do not produce irritation in the tissues. The average length of time that they will maintain their hold in the tissues has already been stated in the directions for preparation of the ligatures.

Other animal substances have been used with success by different surgeons. An Australian surgeon has used and highly recommends ligatures made from the tendons of the kangaroo. He reports very favourable results obtained by their use, but we have not heard of these ligatures being introduced into general use, or in fact of their having been placed in the market at all, so as to be obtainable by the surgeons of this country. Our attention has been called, however, to a ligature manufactured from whale tendon, which is to be found now in the hands of our most reliable dealers in surgical instruments and appliances. This whale tendon ligature is imported from Japan, and is the invention of Dr. Ishiguro, the Chief Surgeon of the Imperial Japanese Army. In its preparation a whale's tendon is teased out until the fibres look very like those of hemp. Then the longest and finest fibres are selected and spun together as ordinary silk thread. According to the reports of the Japanese surgeons who have tested them, some of whom have been connected with the Japanese army in active service, have had excellent opportunity to test them, the results have been eminently satisfactory. One statement made by Dr. Ishiguro as to the readiness with which the whale tendon ligature is absorbed in the tissues, would be calculated to make us seek farther testimony before we should be willing to depend upon it in cases where there would be serious danger from secondary hemorrhage. If it is necessary to put the whale tendon ligature through a special course of hardening with chromic acid or other chemicals in order to prevent too early absorption, it is not probable that it will meet with any very general acceptance. We shall be very glad to have the experience of any who have tested these ligatures, or any other form of animal ligatures.

We observe in the *Medical Times and Gazette* of April 2, 1881, in the report of a discussion before the Royal Medical and Chirurgical Society, Mr. Dent stated that he found these whale tendon ligatures to be too readily absorbed. Another material which has been used with success is a flat ligature cut from the aorta of the ox. Mr. Barwell introduced this ligature, and commends it emphatically to the attention of the profession.—*St. Louis Courier of Medicine*.

LUPUS EXEDENS SUCCESSFULLY TREATED BY CREASOTE AND CALOMEL.

Dr. Clinton B. Herrick reports the following case in the *Medical Annals*.

P. S., aged 65, was admitted into the Albany Hospital (service of Dr. A. Van Derveer), October 21, 1880, with the following history. No trace of disease of ulcerative nature in family. About fifteen years previous, patient first noticed a small wart, about the size of the head of a pin, in front of left ear, which remained about the same for a period of five years. Then it began to get a little sore, and if scratched would bleed, a scab forming afterwards. He also noticed then that a small ulcer was progressing, which increased and spread downward, and then toward his eye, the ulcer healing and crusting over in its track. The character of the sore was, in form, irregular, without discharge, up to this time, and painless, being accompanied however with an intense itching sensation, so great sometimes that the patient could scarcely control himself. The disease advanced, surrounded the eye, implicated the lids, and crept on over the left side of the nose down to the alæ, and a portion on the right side. About three months before coming into hospital the ulcer began to discharge a thin, purulent matter, very profusely so as to require, at times, redressing every hour or less. When admitted, the disease covered almost entirely the upper half of left side of face. At first creasote alone was applied, then the dischloracetic acid was used with some benefit. Then applications were made of creasote and calomel, and from the first use of it the ulcer began to improve. The method of using it was to take a camel's hair pencil, dip it first in the creasote, then in dry powder of calomel, applying it to the edges and where depressions existed, the brush with a twirling motion dislodging and removing the cells. By this treatment, the surface glazed over with healthy skin, its size diminished, and at present there only remains a small portion of the disease over the eyelids, without any indications of its returning or spreading again.

ACTION OF Pilocarpine in Croup after Tracheotomy.—In connection with recent cases which demonstrate the good results obtained in diphtheria by the employment of pilocarpine, I have the honor to communicate the report of a case which is a confirmation of it under a new form, and which contributes in my opinion, to settle briefly the mode of therapeutical action of the medicine.

On Monday, 4th July, I was called in consultation at Kerentrech by my friend Dr. Duliscouet to see young L., six years of age, affected with well marked croup. The situation was so grave

that tracheotomy was deemed immediately necessary. We had at hand only one canula a little too large, but it would have taken too much time to have sent for another. Its introduction into the trachea was tedious and difficult: one moment we believed the patient dead. At length after a struggle of half an hour we had the happiness of calling him back to life.

Tuesday 5th—The night had been safely passed. The cleansing of the canula had been intelligently done by the parents. Temperature 39°. I had read the afternoon before the interesting remarks of Dr. Le Reboullet in the *Gazette Hebdomadaire* (May, 1881); I told my colleague of it.

The same evening the respiration having become harsh and embarrassed, M. Duliscouet injected under the skin of the neck 5 milligrammes of chlorhydrate of pilocarpine in a gramme of distilled water. Five minutes after, abundant salivation occurred: a spell of coughing expelled by the canula a quantity of mucus and false membrane. A perfect calm succeeded and continued during the night.

Wednesday 6th—The child appeared to be doing well. Temperature 38°.2; respiration easy. The little patient took his food without trouble; he was sitting up and playing in bed.

We nevertheless practiced morning and evening a subcutaneous injection of 5 milligrammes of pilocarpine. Every time after some minutes, violent spells of coughing occurred with the expulsion of mucus and false membrane through the canula.

Thursday 7th—The night had been bad. The child was much troubled and restless; temperature 38°.5, respiration more wheezing and expectoration more difficult. M. Duliscouet however seeing no very bad symptom, abstained from making as on the preceding days, an injection of pilocarpine. At two in the afternoon the father came in haste for us. We found the child in a state of advanced asphyxia; the look fixed, face pale and livid, lips purple, extremities cold, etc.

Both canulæ were at once removed. We vainly attempted to extract with a pair of forceps a large piece of false membrane that had appeared in the trachea. The situation seemed desperate. An injection of pilocarpine was given by M. Duliscouet upon the front of the chest. The child was seized with a violent coughing spell and expelled through the tracheal wound a great many pieces of false membrane bathed in mucus. One piece larger than the rest presented the appearance of a bronchial tube and branches. The efforts of coughing lasted thus nearly half an hour, expelling every time pseudo-membranous debris. Gradually the face of the child became colored, showing great relief. At half-past three o'clock everything was doing well.

In the evening another injection of five milli-

grammes of pilocarpine was followed by the usual good effect.

Friday 8th—The child had slept perfectly. There was no fever. Expectoration was purely mucus, a little thick but very easy. A last injection was given as a precaution. In the afternoon the canula removed as a trial, was entirely removed in the evening. The next day and the following days the larynx became freed at the same time that the tracheal wound closed. From this time on the case proceeded without interruption.

We are convinced (Dr. Duliscouet and myself) that tracheotomy alone would not have saved our little patient, and that the honor of the cure was due to the repeated injections of pilocarpine. It seemed to us from every evidence presented, that the beneficial action of pilocarpine is due to the bronchial hypersecretion that it induces and the expulsion of false membrane which obstructs the respiratory tract.—*Journal de Medicine et de Chirurgie*.—*Nashville Journal of Medicine*.

PERITONEAL SURGERY.—The New York *Medical Record* of October 22nd, gives an interesting report of a discussion on the recent progress of peritoneal surgery in the New York Academy of Medicine. The discussion was opened with a paper by Dr. Marion Sims. Dr. Sims reviewed the progress of peritoneal surgery, and specially directed his mind to this question: "Does it lead to a better treatment of gunshot and other wounds of the abdominal cavity?" Dr. Sims claimed for ovariectomy that it was the parent of peritoneal surgery, and that the governing principles of the one must govern all operations affecting the other. Dr. Sims arrived at the following conclusions:—1st. Wounds of the peritoneal cavity have a common course to run. 2nd. They have a common termination, and that is death by septicæmia. 3rd. That is the general law in death after ovariectomy. 4th. It is the general law in death after gunshot and other wounds of the abdominal cavity. 5th. Septicæmia is the result of absorption of bloody serum found in the peritoneal cavity after wounds or operation. 6th. Gunshot wounds of the pelvic cavity are recovered from because of the natural drainage afforded by the track of the ball. 7th. Patients with gunshot wounds of the abdomen die of septicæmia because there is no natural drainage, and the bloody serum falls into the peritoneal cavity, and is there absorbed. 8th. The effect of bloody fluid upon the abdominal cavity is such as to demand abdominal incision, the suturing of wounded intestines, the tying of bleeding vessels, the cleansing of the cavity, and the use of the drainage-tube or not, according to circumstances. 9th. If this operation be well done there is hardly any need of a drainage-tube. Dr. Sayre expressed practically the same views as Dr. Sims. One of the chief features of the discussion was a speech by Dr. James R. Wood.

He allowed much, but "not all the glory," to gynecologists for the advance in peritoneal surgery. He cautioned the Academy against too quickly reasoning from the case of ovariectomy to cases of abdominal wound. He was especially cogent when he showed the difficulty of diagnosing the seat or the nature of the injury in gunshot cases, saying "with reference to reaching into the cavity of the peritoneum in search for bullets, or injured parts, it is a very serious matter"; also in pointing out the difference between a patient about to undergo ovariectomy and one recently the subject of gunshot injury. The one was not in a state of shock, and was well prepared for the operation. The general surgeon has the state of shock to deal with in gunshot wounds of the peritoneum. Such a note of caution from a surgeon of Dr. Wood's boldness and experience will not be misconstrued. It is obviously premature to apply the facts of ovariectomy to gunshot and other wounds of the peritoneum.—*The Lancet*.

MANAGEMENT OF LABOUR IN THE VIENNA LYING-IN-HOSPITAL.—In *Le Medecin* for March 12, is given the following as the *modus operandi* in this Hospital. As soon as the head appears at the vulva, the woman is made to lie on her left side, her right leg being raised and held by an assistant. The accoucheur, standing on the right of the parturient woman, passes his left hand between the woman's thighs, carrying it forward and applying it against the child's head. He supports the perineum with his right hand; but the resistance thus afforded must not be a passive one. He must on the contrary, during each labour pain press energetically over the sacro-coccygeal region, and pull as much integument as he can over the child's head. Meanwhile, his left hand steadies the head at the vulva and prevents its coming out under the influence of uterine contractions. In the interval between the pains, the head goes back, soon to return again. The forced alternate motion which the head undergoes has for its result the gradual distension and a greater elasticity of the vulva. At last, the head comes out and extension takes place. One must carefully prevent this expulsion from taking place during a uterine contraction, and let the head come out when the pain is nearly over. The perineum must be supported to the end, for the passage of the shoulders is ordinarily more dangerous than that of the head itself.—*Le Medecin Practicien*, March 12.

A MALPRACTICE suit in Belgium, brought against a physician for the alleged improper prescription of morphia, resulted in acquittal not only, but the plaintiff was adjudged to pay the defendant one thousand francs damages. It is reported that the action was instigated by a rival doctor.

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Criticism and News.**

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THE PAST YEAR.

Many events have transpired in the medical world during the past year which are well worth recounting, although with one notable exception, none may be said to have been pre-eminently noteworthy. Only those who have watched closely the tendency of the times and the progress of events, can form a correct estimate of the great advances which are being made all along the line. Medicine to-day holds a position of pre-eminence among the learned professions, never before attained in history, and its prospects are brightening and widening from year to year. Although, with the revolution of each year, there appears as in the movement of a carriage wheel, to have been but a change of position which brings us back to the same point, yet, as in the wheel, there is a progressive advance equal to the length of its circumference; so it is in medicine. The advance to many may appear slow, and as it were, only in a circle, ever returning to the same point again; it is, nevertheless, a positive progressive advance.

The mental activity among the members of the profession in all parts of the world; the interchange of new lines of thought and ideas; the friendly and professional associations that are being formed; the increasing interest in science and truth, for its own sake; and the increasing amount and value of experimental research and investigation, are all contributing in no small degree to the rapid and lasting advancement of our noble profession.

The noble charity of our art is also seen in the

philanthropic efforts of the profession for the amelioration of the sufferings of the race, so far as may be accomplished by attention to hygienic laws and measures of sanitary reform. The various governments of the country have been besought again and again by the profession, to initiate certain measures for the improvement of the condition of the people in sanitary matters, and their requests have been met with a spirit of enquiry by these governments who, we have no doubt, but for their utter want of knowledge of such subjects, would ere this have given effect to the required legislation. The way is rapidly opening up now, however, and sooner or later these much needed measures will be obtained.

The greatest event of the season so far as medical affairs are concerned, was undoubtedly the meeting of the International Medical Congress, held in London in August. Here were gathered together from all parts of the civilized world, the leading lights of the profession, seeking to lay at each other's feet, the results of their labours, in the advancement of science, and the pursuit of truth, and to learn wisdom from each other. No one attempted to say that he was right and all the world wrong, but each was perfectly willing to have his work tested by the crucible of the great minds, and the experience of his fellow-workers in the profession, and if valuable to have it recorded for the benefit of posterity, or if worthless, to have it cast aside and forgotten. Such a spectacle is not often beheld. Here were upwards of three thousand of the foremost minds of the profession, some of them from a great distance, collected together, to discuss questions of vital interest, not only to the profession, but more especially to the welfare of mankind in general.

The meeting was opened by H. R. H. the Prince of Wales, and among those present may be mentioned such names as Sir Jas. Paget, Virchow, Jenner, Charcot, Langenbeck, Pasteur, Volkmann, Esmarch, Kuester, Panteleon, Trelat, Pancoas, Flint, and many others of equal eminence. The addresses were all, without exception, of the highest order of merit, and the work of the different Sections was of the greatest possible interest and importance, from a professional point of view. The entertainments were almost unlimited, and some of them of unsurpassing grandeur, the *tout ensemble* of the entire gathering making it one long to be re-

membered by those who had the good fortune to be present.

The meeting of the British Medical Association, which was held in the Isle of Wight almost immediately after the former, and which is usually considered the great medical event in England, although in some measure overshadowed by the Medical Congress, was, on the whole, a very successful affair, and obtained some considerable notoriety through some remarks in the President's speech, and also by others present to the same effect, looking towards a certain degree of professional intercourse with homœopathic practitioners. The remarks were, no doubt, the outcome of the discussion which had been going on for some time previous regarding Dr. Jenner's refusal, and Dr. Quain's acceptance of a consultation with Dr. Kidd, at one time a pronounced homœopath, during the illness of the late Lord Beaconsfield. We, in common with many others, felt a good deal of sympathy with Dr. Quain's position in this matter, and believe that, under all the circumstances, he acted not only judiciously but also in the best interests of the profession, inasmuch as he was informed by Dr. Kidd that he was not treating his patient homœopathically. There could, therefore, be no other than a merely sentimental ground of objection to meet Dr. Kidd, and give the benefit of his skill to an illustrious man. There may be times and circumstances in which an opposite course would be the most politic, but certainly not in the case referred to, where the life of one of England's greatest men hung in the balance. This was no time for any mere sentimental objections to obtrude themselves, and certainly Dr. Kidd cleared the way of all others.

The American Medical Association met in May in the city of Richmond, Va., under the presidency of Dr. Hodgen, of St. Louis, and was attended by about five hundred delegates from all parts of the Union. The address on surgery was delivered by Dr. McGuire, chairman of the surgical section. He advocated operative interference in penetrating gun-shot wounds of the abdomen with intestinal injury, and the use of the drainage tube. Dr. M. Pepper, of Philadelphia, delivered the address in medicine, in which he dwelt upon the great importance of local lesions as forming the cause of many apparently obscure diseases. He also alluded to the value of remedies possessing special antidotal

power against contagious diseases, and referred to the remarkable results recently observed in the treatment of diphtheria by the use of large doses of bichloride of mercury. In the business part of the proceedings, a resolution was passed and a committee appointed relative to the establishment of a weekly journal for the publication of the transactions, similar to the *British Medical Journal*, in lieu of the present system. Dr. J. J. Woodward, of Washington, was elected President for the ensuing year, and St. Paul, Minn., selected as the next place of meeting, on the first Tuesday of June, 1882.

The Canada Medical Association met at Halifax, N.S., on the 3rd of August, under the Presidency of Dr. Canniff, of Toronto, and although the attendance was not large, yet the meeting was on the whole a most successful one. The address of the President, on the subject of "Medical Ethics," was one which much required reviving, and was well received by the profession. The papers read were of more than ordinary merit, and elicited considerable discussion of a profitable character. The Committee appointed at the last meeting relative to the establishment of a Bureau of Health for the Dominion, reported the result of their interview with the Government, which was on the whole very satisfactory, though nothing definite had yet been accomplished. Dr. Fenwick, of Montreal, was elected president for the ensuing year, and Toronto selected as the place of meeting on the first Wednesday in September, 1882.

The inauguration of a Medical Association for the Province of Ontario was begun and successfully carried through in the early part of the year. The first meeting was held in Toronto, on the first and second of June, under the able presidency of the venerable Dr. Workman, and was a grand success, in every sense of the word. Many excellent papers were read and discussed, and much real substantial work done, and the profession in this Province is to be congratulated upon the successful organization of an association which promises so well for the future. The next meeting will be held in Toronto under the presidency of Dr. Covernton, on the first of June, 1882.

In the field of medicine and therapeutics, the advances have been chiefly towards a consolidation of past gains and the elimination of former errors. Our knowledge of the localization of cerebral functions has made some progress. In addition to the

localization of motor areas, Dr. Ferrier has recently defined the areas of sight and hearing. Some interesting facts relating to the temperature in General Paresis have been brought forward during the past year. Dr. Reinhart (Archiv), states that this disease may be diagnosed from other forms of mental disturbance, by the relative excess of the temperature of the head over that of the body, and by the great variations of bodily heat from day to day. Dr. Croemer, (Allgemeine Zeitschrift,) asserts that the bodily temperature is abnormally low, and insists in the daily oscillations described formerly by Dr. Clouston, and which seem to be characteristic of the disease. Dr. Allara, (Sperimentale, 1881,) expresses his belief that bronchocele is caused by drinking water containing a silicate of an alkaline base, and that the administration of the alkaline carbonates, owing to the power they have of decomposing these silicates, has a beneficial effect upon the disease. The practice of washing out the stomach in certain diseases has again been revived. Dr. Constantine Paul, in (*Bul. Gen. de Therap.*), speaks in high terms of the advantages to be derived from it in certain cases. He prefers the syphon tube to the stomach pump, and recommends first a quart of plain warm water, to be repeated until it returns clear, and then a weak alkaline solution of bicarbonate of soda, or an antiseptic one of hyposulphite of sodium as may be required. Dr. McL. Hamilton, of New York, recommends a new silver salt, the tribasic phosphate of silver, in nervous diseases. The dose is from one-third to half a grain three times a day in glycerine. Its use may be continued for months, as it does not discolour the skin. He has employed it with advantage in cases of spinal sclerosis, myelitis, epilepsy and cerebral tumor. Dr. Schwarz, (*Dtsch. Med. Woch.*) strongly recommends iodine and iodide of potassium in membranous croup, believing them to be the true remedies in uncomplicated cases. The value of pilocarpine has also been much vaunted in the treatment of this affection by Dr. Guttman, who claims that in doses of $\frac{1}{2}$ to $\frac{1}{8}$ of a grain, every hour, it produces salivation, and also loosens the membrane. The results of its use however, have not been so good in other hands as they appear to have been in his. Papayotin is also said to possess the power of dissolving the membrane in croup and diphtheria, but it has not been thoroughly tested.

Dr. Tompkins (*Lancet*, March 1881,) speaks very highly of the antipyretic action of salicylate of sodium in typhoid fever, and reports the results of forty-six cases in which it was employed. He gives it in 15 to 20 grain doses every two hours, commencing its use whenever the temperature reaches 102° F. This is continued for about six doses, when the temperature will be found to have fallen two or three degrees; the dose is then diminished one-half. One objection to its use is, that it is liable to disagree with the stomach. This remedy has also been used by M. Labbé with varying degrees of success in neuralgia. Duboisine given hypodermically in doses of $\frac{1}{8}$ to $\frac{1}{4}$ of a grain, has been found very serviceable by M. Desnos (*Bul. Gen. de Therap.*) in the treatment of exophthalmic goitre. The action of the heart becomes steadier and slower, the goitre pulsates less, and the general health improves under its use. The use of inhalations in the treatment of phthisis has again been revived. This method of treatment is not only advocated by Dr. McKenzie, of Edinburgh, but also by Drs. Coghill and Hamilton, in the *Brit. Med. Jour.*, May 28, and July 2. Inhalers for the purpose have been devised, which answer the requirements, and the substances used are, tinc. iodini ætherialis, acid carbolice, and creasote either separately or combined as may seem most suitable, and much benefit is said to have been derived from the treatment. Nitroglycerine is a new remedy which has received some degree of attention during the past year. The dose is one or two drops of a one per cent. solution. The action is somewhat similar to nitrite of amyl, in reducing systemic contraction. It has been used with benefit in angina pectoris, in acute and chronic Bright's disease, migraine, &c., &c. The efficacy of quebracho in all forms of dyspnoea shows it to be a most valuable addition to our therapeutic armamentarium. The dose is from twenty to sixty drops of the fluid extract every hour or two, as called for by the emergency of the case without reference to the exciting cause.

In the domain of surgery considerable activity has been manifested, and some new and important principles have been adopted. The invention of Faure's, storage battery, and Swan's electric light, seems to open up the way to greater usefulness of this wonderful agency in surgery. The storing up of electricity for use in the removal of a nævoid or

cancer of the tongue, is a feat little contemplated a year or so ago; and Swan's light will enable the surgeon to test the translucency of parts under examination, or the character of the interior of organs capable of being reached in this way. Abdominal surgery has been pushed to the extent of operating for the removal of hydatids of the liver. Lawson Tait, reports 6 cases in which the operation was successful, and yet no attempt was made to conduct the cases upon Listerian principles. Keith's recent successful cases also show that his former success was not due to Listerism, but to the care and cleanliness so greatly observed by that master surgeon in the treatment of all his cases. Several successful cases of gastrotomy and laparotomy have been reported from time to time during the year, all of which lead us to hope much for the future of peritoneal surgery. In the operation of tracheotomy in croup, Dr. Mastin, *Annals Anat. & Surg.* dispenses entirely with the canula, or any mechanical contrivance, and uses only wire or threads to keep the wound in the trachea open; while Golding-Bird has adopted a new plan of mechanical treatment, which consists in the application of an instrument somewhat similar to a nose speculum, to keep the tracheal wound open. Operators are gradually discarding the old-fashioned tubes as being dangerous from their irritation, and also their liability to become clogged up. Prof. Billroth has successfully performed the operation of ex-section of the pylorus for cancer. The disease involved the pylorus and about $\frac{1}{3}$ of the stomach. The duodenum was cut across, and the stomach divided above the seat of disease. The large opening in the stomach was then sewed up, until an opening was left about the size of the duodenum which was then stitched into it. Fifty-four carbolized silk ligatures were used; no unfavorable symptoms followed the operation. Ice was given by the mouth for the first few hours, and after that milk in small quantities. On the 8th day some solid food was allowed. He also performed the operation of excision of a cancerous stricture of the sigmoid flexure, forming an artificial anus in the groin, but the patient died about thirty-six hours afterwards from diffuse peritonitis.

M. Koeberle reports, in the *Gaz. Hebdom.*, the most successful case of resection of the intestine yet recorded, viz., the removal for intestinal ob-

struction, caused by cicatricial contraction, of two metres (about six feet six inches) of the intestine. The result was a perfect success, with entire recovery of the patient. An ingenious application of the principle of the elastic bandage of Esmarch has been made by Trendelenburg in amputations at the hip-joint. It consists in passing a large needle, armed with an elastic cord, in front of the joint, and tying it before cutting the anterior flap; then disarticulating, and repeating the same procedure behind, before cutting the posterior flap, thus rendering the operation almost entirely bloodless. Several cases of removal of the kidney, some successful and some not, have been reported during the year, the result upon the whole being such, however, as to warrant the advisability of the procedure in certain cases. The spleen has not been disturbed more than once or twice during the past year, and these cases terminated fatally. One of them was performed by a Detroit surgeon. The operation is not growing in favor, and spleen people will have to go unrelieved until some other mode of treating this organ is hit upon. Dr. Bryant reports several cases in which early amputation of diseased joints has had the effect of causing decided improvement in the condition of the lungs, previously involved in tubercular disease; the inference being that the presence of tubercles in the lungs is not a bar, as formerly believed, to an operation. In the *Lancet* for May 28, Dr. McEwen reports a successful case of transplantation of bone in a child four years of age. The shaft of the humerus had become necrosed; there was no attempt at osseous repair, and the limb was useless. Making a groove in the centre of the soft tissues, he placed therein small fragments of wedges of bone, removed from other patients for curved tibiae. The result was the formation of a new shaft and complete restoration of the use of the limb.

In Obstetrics and Gynæcology there is nothing which may be said to be very new or startling though much that is interesting. In the management of ruptured perineum most gynæcologists are now agreed upon the propriety, as a rule, of immediate treatment by means of silk or silver sutures. Cases so treated, if properly stitched, generally do well, and the patient is spared a great deal of worry and after trouble. A considerable degree of success has attended the treatment of rupture of the uterus,

by washing it out with carbolized water and inserting a drainage tube. Dr. Frommel of Berlin gives a report of eight cases, in seven of which laparotomy was performed and all died, while the eighth case, treated by irrigation and drainage recovered. In the *N. Y. Med. Journal* for February, Dr. Noeggerath gives some improvements in the operation of ovariectomy which are worthy of a passing notice. One drachm of potassium bromide is given daily to the patient for two or three days before the operation, and thirty grains of chloral per rectum after. The patient during the operation, to prevent lowering of the temperature, is placed on a rubber bed filled with water at 100°F. He makes his incision through the skin and superficial fascia, then plunges in a trocar and empties the cyst before opening the peritoneal cavity. If the escaping fluid is thick or grumous he injects a 2½ per cent. solution of carbolic acid to disinfect the fluid in the event of any of it passing into the abdominal cavity during the operation. After the cyst is emptied, he then opens the cavity and removes it in the ordinary way. Renewed attention has been given to what is known as Crede's method of removing the placenta, viz: by expression; and Crede himself has written an article in the (*Archiv.*) to show that his method does not consist in an immediate expression of the placenta. He places the hand upon the uterus and moves it about gently, waiting for a contraction. Then the uterus is grasped and pressed towards the hollow of the sacrum. In pruritus vulvæ, Dr. Wiltshire (*Brit. Med. Journal*) adopts Friedreich's view, that nearly all local applications that give relief are parasitocides, and that the pruritus is due to the development of fungous organisms. He recommended borax wash, grs. xii. or more to the ounce, mercurial ointment, corrosive sublimate used with caution, iodine, chloral, hydrocyanic acid, etc. Spencer Wells gives the particulars of 200 additional cases of ovariectomy, making 1,000 in all in (*Brit. Med. Journal*, March 5th); 231 of the patients had died, and 769 recovered. The percentage of mortality had steadily diminished from 34 in the first 100 to 11 in the last. Dr. Moberley Smith, (*Lancet*, July 16), reports most gratifying success in the treatment of puerperal convulsions with hypodermic injections of morphia, viz.: from a quarter to a third of a grain. This is in accord with the experience of Dr. C. P. Clark, (*Amer. Jour. Obstet.*), July 1880. These facts

would lead to the assumption that nervous irritation is a prolific cause of this affection. Chloral hydrate and chloroform or ether, also have a beneficial effect, no doubt upon the same principle, and those who would readily administer the latter may yet have some misgivings about the advisability of the former. Dr. Goodell, (*Med. and Surg. Reporter*) expresses the opinion that the most common cause of laceration of the cervix is from too early rupture of the membranes, and states that as a rule the accoucheur should wait till the os is dilated.

Among new books, and new editions of old ones published during the year, may be mentioned Lusk's Midwifery; Glisan's do.; Flint's Practice of Medicine; Bryant's Surgery; Diseases of the Skin, by Duhring; Materia Medica and Therapeutics of the Skin, by Piffard; Albuminuria, by W. H. Dickenson; Bosworth, on the Throat; Wood's Library; Ziemssen's Cyclopædia, vol. IX., Supplement and Index; Beard & Rockwell's Electricity; Tyon on Bright's Disease and Diabetes; Flint's Physiology; Foster's do.; Agnew's Surgery; Magnin on Bacteria; Benedikt on Brains of Criminals; Cutaneous Syphilis, by Fox; Diseases of the Nervous System, by S. Weir Mitchell; Morton on the Eye; Niemeyer's Practice of Medicine; Holmes' Surgery, vols. i. and ii.; Reynold's Practice of Medicine; Bartholow's Medical Electricity; Index Catalogue, Library Surgeon-Genl's. Office, U. S.; Taylor's Medical Jurisprudence; Clowe's Chemistry; Green's Pathology; Van Buren on Diseases of Rectum; Holden's Landmarks; Satterthwaite's Histology; Fothergill, on Indigestion; Harrison on the Urinary Organs; Smith on Diseases of Children; Hartshorne's Essentials, &c., &c.

The obituary notices are more numerous than usual. Among those of our own confreres who have paid the debt of nature, may be mentioned Hon. Dr. Brouse, Ottawa; Dr. Mack, St. Catharines; Dr. Berryman, Toronto; Drs. J. K. Oliver, Kingston; W. Harkin, Vanleekhill; H. F. Tuck, Orangeville; A. H. Fraser, Brockville; E. S. Beljeau, St. Michel, Que.; H. B. Forman, Parrsboro, N.S.; Wm. B. Malloch, Brockville; R. F. Godfrey, Montreal; J. G. B. Morrison, Metaghan, N.S.; W. Mostyn, Almonte; M. M. P. Dean, Keene, Ont.; G. P. DeGrassi, Toronto; J. P. Nash, Picton; J. A. Gregory, Fredericton, N.B.; G. Burnham, Peterboro; A. W. Herrington, Carman City, Man.; W.

Lambert, Amherstburg; N. Fleming, Mildmay, Ont.; H. Parsley, Thornbury; A. Chapman, Muskegon, Mich.; J. A. Purney, Shelburne, N.S.; A. Robertson, Liverpool, N.S.; J. G. Bibaud, Montreal; N. Munro, Detroit, Mich.; W. G. Middleton, Stella, Amherst Isld.; A. McMichael, Gorrie, etc., etc. Among those in distant lands we find the names of Bouillaud, of Paris; Wilms, of Berlin; Dr. Sanders and Andrew Wood, of Edinburgh; Professor Rolleston, M.D., of Oxford; Skoda, of Vienna; Dr. Bradford, of Manchester; Prof. Schleiden, of Frankfurt; Spiegelberg, of Breslau; McClinck and Hayden, of Dublin; Foulis, of Glasgow; Hays, of Philadelphia; Greene, of Portland; Bache, of Philadelphia; White, of Buffalo, and many others.

We need scarcely allude to the assassination of the President of the neighboring Republic, as the circumstances are still fresh in the memory of our readers, who perhaps more than any other members of the community took a deep interest in the progress of the case, and also in the surgical treatment of the patient. Nor need we refer to the last act of the drama which is now being *played* in an American Court of law. The year has been more prolific than usual of disasters at sea, and on land, the latest and most harrowing of which was the burning of the Ring Theatre in Vienna, attended with an appalling loss of life, which might easily have been averted in great measure had there been ordinary care taken to permit of ready escape from the building in case of accident. The country has upon the whole been very prosperous, and free from any serious epidemics or plagues, except the too frequent occurrence of malignant diphtheria, chiefly in Quebec and the Maritime Provinces. We conclude by wishing our readers, one and all, a happy and prosperous new year.

ALLEGED ADVERTISING.—In our last issue we referred to a case of alleged advertising by a prominent medical man in Port Hope. We are glad to be able to say that since then we have received a letter from the editor of the "*Times*" in which he states that the medical gentleman in question has never written any paragraphs for the paper, and was in no way responsible for the one alluded to; on the contrary he has invariably requested that his name should not appear in the paper in connection with any item or accident of a medical or

surgical character. The editors of the *Guide* and *News* corroborate in effect, the above statement. The medical gentleman must, therefore, in justice be entirely exonerated from all blame, and we regret that any injustice should have been done him in the matter.

VEXATIOUS LITIGATION.—We understand that an attempt is to be made to revive the Tost-Freeman case, which was reported in the *Laurel* for March 1881. This was an action brought by one Tost, against Dr. Wm. Freeman of Georgetown Ont., for alleged malpractice in the treatment of a fracture of the forearm. The case after considerable delay was tried before Justice Galt, at the Hamilton Assizes, in January last, and after hearing the evidence the Judge very properly refused to allow the case to go to the jury. The renewal of this case now, is a great hardship, for if it should go to trial, the hard earnings of a diligent practitioner will have to be spent in defending himself against a man worthless in every sense of the word, backed by men who should be above lending themselves to anything so contemptible.

CORRECTION.—It appears that we, as well as many others, were in error, in the statement that the surgeons in attendance on the late President had sent in their bills for services rendered. The *Medical Times*, Phila., speaking with authority from Dr. Agnew, says that no bills have been sent, and that the matter of remuneration will be left entirely in the hands of Congress.

APPOINTMENTS.—Dr. L. D. Migneault has been appointed to the Chair of Anatomy, in Victoria Medical College Montreal, made vacant by the death of Dr. Bibaud.

Dr. L. McFarlane of this city, has been appointed to fill the unexpired portion of the term of the late A. F. Campbell, M. D., in the Senate of Toronto University.

Dr. Louis Elsberg of New York, has been appointed Professor of Laryngology, and Diseases of the Throat, in the Dartmouth Medical College, having resigned his Professorship in the Medical Department of the University of New York.

Dr. McMillan of Alexandria, has been called to the Senate of the Dominion; and rumour has it that Dr. McInnis of New Westminster, B. C., has also been appointed to a similar position.

CORONERS.—Dr. R. W. Clark of Hastings Ont., has been appointed associate coroner for the Counties of Northumberland and Durham Ont.

Dr. Stanley Scott of Newmarket, has been appointed an associate coroner for the County of York.

Dr. W. H. Taylor, of Bradford, has been appointed an associate coroner for the County of Simcoe.

BRITISH QUALIFICATIONS.—W. F. Cleaver M. D. Kingston, has been admitted a member of the Royal College of Surgeons England. Drs. M. L. Cameron, W. Gunn, H. R. Elliott, D. McTavish, and W. Cormack, have received the double qualification of L. R. C. P., & S. Edinburgh; and Drs. E. A. Stutt, A. McC. Sloan, and G. Wilcock, have received the L. R. C. P., Edinburgh.

F. O. S.—Dr. F. P. Taylor of Charlottetown, P. E. I., has been elected a Fellow of the Obstetrical Society of London, England.

Dr. St. Jean, has been elected mayor of Ottawa, without opposition.

Books and Pamphlets.

1. **LECTURES ON DIGESTION:** By E. A. Ewald, lecturer in the Royal College of Berlin, etc. etc.
2. **INDIGESTION AND BILIOUSNESS:** By J. Milner Fothergill, M.D., M.R.C.P., etc. etc., London.
3. **FOOD AND DIETETICS:** By F. W. Pavy, M.D., F.R.S., F.R.C.P., etc., etc.
4. **GENERAL MEDICAL CHEMISTRY:** By R. A. Wihhaus, A.M., M.D. Professor of Chemistry and Toxicology in Vermont University, etc., etc., etc.
5. **THE WILDERNESS CURE:** By Mark Cook.

The above books are all from the enterprising press of Wm. Wood & Co., New York. We have done our best to get through the first three, but we regret to have to confess that the condition of our digestive powers was very little improved by the undertaking. Somebody, and he was no fool, said those who digest well, have never found out that they have a stomach. This was not our state of mentality on relinquishing the perusal of the gastric triad which heads our present list. How could one swallow, without feeling flatulent and squeamish, the following dose, presented in Dr. Ewald's 5th lecture?

"If," says the author, "I were to give you a table of the action of the pancreas on albumen and gelatine, similar to that for pepsine, leaving out chemical details" (thanks, dear Ewald, for the grace) and accepting Kühne's views, it would take the following shape:

Albumen x. Trypsin (Pancreatin)x. Soda solution of 1 p. c. forms, at the body temperature, first globulin insoluble in water, and then:

Hemipectone.—Leucin, Trypsin, Hypoxanthin, Asparaginic Acid, Glycoll: Normal Digestive Products. *Antipeptone.*—Indol, Phenol, Fatty Acids, Ammonia, Sulph. Hydrogen, Carbonic Acid:

Are not the above jawbreakers, enough to turn topsy-turvy the whole process of digestion, and to make a prudent person forswear forever the mastication of a particle of gristle? for from this tissue, roasted, boiled or stewed, come forth the seven *half-toned* abominations, which generate *bacteria* and *micrococci*, and who knows how many more of their *ad infinitum* backbiters. Let the reader hear and ponder well. "It scarcely needs to be mentioned that the occurrence of the bodies described as products of putrefaction" (bah! sulph. hydrogen) "is contemporaneous with the development of bacteria," (back out, if you can, from that,) "and micrococci, as an almost universally admitted result of them. These organisms are taken up with the food, and find in the intestine a favourable nidus for their development." Alas, for us defenceless, human bipeds! but thrice happy "just killed dogs and rabbits," in whom Ewald has "never found bacteria or micrococci;" yet dogs eat gristles and bones whenever they are fortunate enough to light upon them, nor is it very common with them to eruct sulphuretted hydrogen. This must be the result of their ignorance of organic chemistry.

Here is another truly startling fact, which we have shuddered over, in Ewald's 10th lecture.

"But if we turn away from this practical point," (whatever that was) "it is certainly very interesting that phenol, which we make use of extensively every day for its antiseptic properties, should be found as a product of putrefaction, and that actually in our own intestines!"

And why not? Should not home manufactures be encouraged? and is it not a homœopathic certainty that like cures, (or kills), like? Have not Jenner and Pasteur proved that infinitesimal contagion of men and animals proves re-

pellant to future invasion? If, however, we have in our intestines already from gristle-eating, a sufficient amount of phenol and sulphuretted hydrogen, etc., etc., to fertilize the soil for the germination of bacteria, may we not kill out these vermin by too high enrichment of the soil? Eureka! Too much of any good thing is just enough. "The baccy hick, if you be well, will make you sick; but the baccy hick, if you be sick, will make you well."

But parting with phenol and fun, here is a passage from Ewald's 12th lecture, which we humanely commend to a certain number of highly valued friends, whose groanings and moanings over rebellious bowels, ill-natured head-aches, sleeplessness and morning lassitude, often distress our vibrating sympathies.

"The intervals between meals are often too long, between others too short. It is so particularly with us," (Germans), "but especially in England and America, where the custom is to eat a large breakfast, and then go till evening without eating hardly anything, and at six o'clock" (rather seven) "to take another meal, naturally then in abnormal quantity. This not only causes inactivity of body and mind, which always accompanies the digestion of large meals, but is the cause of numerous disorders of the digestive system, especially of the stomach."

"Abnormal quantity!" Not a word as to quality, multitudinosity, gastric goading, spicings, and saccharine enticings? Why! the poor man knows little of English and American *gourmandise*. Best so, for must not doctors and druggists live? And are not these late-dining big eaters, the very cream of their support? They certainly are, and it would be a crying sin to intercept their patronage, or to try to suppress their self-sacrificing virtue.

Well, this little volume of Professor Ewald's has monopolised so much of our attention and space that we have too little left for the four others lying before us. Fothergill's *Indigestion and Biliousness* is both a racy and instructive book. We quote but the following paragraph from the conclusion, to satisfy every sensible mother, and every common sense doctor, that the author has had some personal experience of the unpleasantness (to both parents) of icy cold feet, both in themselves and their babies.

"Cold hands and feet are a very frequent indication of imperfect nutrition in children. These

should be attended to, the children should not be allowed to go to bed with icy feet, which will often be the means of causing wakefulness for some length of time after retiring."

Dr. Pavy's "*Food and Dietetics*," being inscribed to the Right Honourable Lyon Playfair, M.P., C.B. and F.R.S., we take for granted must be a work of considerable merit. We do, however, sincerely trust that the author has not made personal *proving*s of more than a limited percentage of the *alimentary substances, beverages and condiments*," whose dietetic and other properties he details. If, unfortunately he has fallen into this mistake, he will do well to read "*Cook's Wilderness Cure*," and come across to the Adirondacks.

WALSH'S PHYSICIANS' CALL-BOOK AND TABLET FOR 1882, Sixth Edition. Also, WALSH'S PHYSICIAN'S HANDY LEDGER, published by Ralph Walsh, M.D., Washington, D.C.

Walsh's visiting list is very convenient in size and form, easily carried about in the pocket, and well adapted for the purposes intended. It is ruled to accommodate a practice of thirty-five patients per week for one year. The erasing tablet is a special feature, and will be found very useful. The Handy Ledger, is a day-book and ledger combined, and is peculiarly adapted to the practitioner's wants. It will accommodate 600 or 1200 names according to size ordered. The simplicity of the method is what commends it especially to the attention of the profession. It is so arranged that the gross amount and items of any account may be readily ascertained in a moment.

THE MONTREAL WITNESS, PUBLISHED BY J. DOUGALL & SON, MONTREAL.

The proprietors of this paper announce for 1882, the following features besides the ordinary news department, viz., a Legal, Agricultural, Veterinary, Poultry, and Apiary department, each presided over by thoroughly competent persons. The paper is liberal in tone, has no party connections, but supports on every question what it believes to be right. The following premium pictures are offered with the *Daily Witness*. "The Roll Call after the battle of Inkermann," and "Quatre Bras," representing the first stroke of Waterloo; and either of the above pictures with the *Weekly Witness*. Price of the *Daily*, \$3.00; *Weekly*, \$1.10; *Northern Messenger*, for young people, and Sabbath-schools, 30 cts. per annum.

Births, Marriages and Deaths.

On the 28th Dec., Dr. E. Cook, of Norwich, in the 77th year of his age.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

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Original Communications.

POISONING BY STRAMONIUM.

BY CASEY A. WOOD, C.M., M.D., MONTREAL.

Attending Physician to the Woman's Hospital; Professor of Chemistry and Medical Chemistry, University of Bishop's College.

[Read before the Medico-Chirurgical Society, Montreal.]

Instances of poisoning by the various parts of the Jamestown weed are sufficiently uncommon to make them worthy of record. In the following case I was, fortunately, able to watch the patient throughout the whole illness.

At half-past six on the evening of the 17th of September last I was sent for hurriedly to see a little girl, aged five, who was said to have been poisoned by eating castor oil seeds. On my arrival at the house I found, from the mother, that the little patient had been in perfect health previous to her present illness, which had come on suddenly at five o'clock, and within twenty minutes after eating, as was then supposed, part of a castor oil seed capsule. I also learned that she first complained of great dryness in her throat and burning at the roof of the mouth, and had asked for a rag and a cup of water to wash her tongue. The child since then confessed, that she wanted the water to wash off the remains of the poison which she thought she felt in her mouth. Shortly afterwards she complained of being very thirsty, but seemed unable to swallow the water that was offered her. She then said she was sick at the stomach, but did not vomit, although she made several efforts to do so. The child's mother, noticing for the first time, that there was something wrong with the child's eyes, and that her face was flushed, told her to lie down, which she did and soon fell asleep. Fifteen minutes afterwards she awoke, complained of pain or burning in the pit of her stomach; got up from the sofa on which she was lying and tried to walk

across the room, but was unable to take more than two or three steps without falling, and yet she did not complain of giddiness or of ringing in her ears. Twitching of the muscles of the forearm and leg was the next symptom noticed, soon after which she became delirious. In the early stage of the delirium, she frequently protruded her tongue as if it felt hot, or to indicate a desire for water. When I saw her, an hour and a half after eating the seeds, she was lying on her back apparently unconscious, delirious, and in convulsions, making every now and then an attempt to catch with her hands imaginary objects in the air. Her eyes were bright and glistening; the conjunctivæ red and injected, and the pupils widely dilated and insensible to light. The delirium was of the "busy" kind; she would talk rapidly and incoherently for a time and then break out into laughter. This might be succeeded by a short fit of crying accompanied by an expression of terror on her face; or she would suddenly start back as if some object were about to fall on her. On several occasions this state of fear was brought about by some one approaching or stooping over her, and she twice appeared to attempt to strike one of her sisters who came near the bed. The convulsions were general; the twitchings of the hands and feet being plainly marked throughout. The skin of her whole body was dry, felt hot and was of a deep bright scarlet color. The temperature was normal, the pulse small and accelerated, but owing to the convulsive movements of the child's body I was not able to count it accurately. Her breathing was interrupted but not rapid. These symptoms did not of course indicate poisoning by castor oil seeds, and I had little difficulty in identifying one of the supposed *ricinus* capsules shown to me with the thorny fruit of the *datura stramonium*. It appears that a neighbor, ignorant of the poisonous properties of the plant, had cultivated it for the beauty of its flowers, and having thrown several of them, "gone to seed," over his fence on to the sidewalk, they were observed and taken possession of by some children playing close at hand. My patient being one of the number, and having a predilection for original investigation had eaten part of one. As the poison had been taken on an empty stomach, and as it was probable that some of the soft albuminous pulp surrounding the seeds had been eaten as well as the seeds themselves, I concluded that the former

had been mostly absorbed and that the latter had passed into the small intestines. Added to this the insensible condition of the patient and the difficulty with which she swallowed, I decided not to make any persistent effort to bring on vomiting, but administered at once a strong purgative (of calomel and rhubarb, I think,) and followed it up by a large rectal injection of linseed tea and castor oil. She had in consequence of this several copious motions from the bowels. They seemed to relieve her, and with the last one, during the night, she passed three or four half digested stramonium seeds. At 7.30, and every subsequent hour until midnight, I administered 5 grs. each of chloral hydrate and potassic bromide, with a view of controlling the convulsions, but I think they produced little or no effect. At 1 a.m. I gave her a hypodermic injection of $\frac{1}{10}$ gr. of muriate of morphia, intending to repeat it if necessary. I was not obliged to inject a second quantity, for in three quarters of an hour afterwards she fell into a troubled sleep which lasted until 10 a.m. next day. At 11 a.m. she was still nervous, with a red flushed face, twitching hands and widely dilated pupils—but perfectly conscious and able to give an account of how she obtained the stramonium capsules. The nervous and other symptoms passed off during the day but the mydriasis lasted all that day, the next night and part of the following Monday, when she seemed as well as ever. As far as I can learn by watching the evacuations and questioning the patient, and the children that were with her, she probably ate about half a dozen seeds and about the same bulk of the pulpy matrix in which they were imbedded. Even where comparatively large quantities of the plant are taken, people usually recover from the poison. Woodman & Tidy give an interesting *resumé* of datura poisoning cases in their work on Toxicology. A boy, aged 7, ate a quantity of green seeds and after serious symptoms got well. Seven children, between 6 and 9 years of age, took each ten seeds and all recovered. A little girl ate 3jss. of 'the seeds, and a boy, aged 4, a tablespoonful, and yet both recovered. However, Christison mentions a case where a decoction of 125 seeds was taken and death was the result in seven hours. So, too, there is a case recorded in the London "Medical Gazette," (vol. xv. page 320) in which 100 seeds were eaten by a child 2 years old and death resulted in 24 hours.

These different terminations may be foreseen if it be known whether the poison has been swallowed in the form of concentrated extracts or tinctures, or if merely the seeds have been taken. The one is the poison encapsuled, the other in solution.

The most interesting questions that arise in connection with this case refer to the detection of the poison, and I have endeavoured, with more or less success, to answer some of them. Would the urine of a person poisoned by so small a quantity of thorn-apple seeds and pulp give sufficient evidence of the nature of the poison?

And again, having proved the agent in question to belong to one of a certain class of vegetable poisons, have we any means of determining exactly from what plant it is derived?

To decide the first question I had preserved the first urine passed by the child after seeing her. This, voided at 10 a.m. on Sunday, and amounting to about 3vi., was treated for me by my friend Mr. Bemrose as follows: liquor sodæ was added until the mixture became distinctly alkaline. This was shaken up with 3ij. of ether, and on standing the supernatant liquor was removed by means of a separator. This process having been repeated three times the ethereal solutions were mixed and allowed to evaporate spontaneously. The solid residue was now dissolved in pure water acidulated with hydric chloride. Again, liquor sodæ was added and the resulting alkaline solution twice washed with ether. On evaporating the second ethereal solution there remained a thin film of nearly colorless, odorless, amorphous matter to which on the 29th of October, I applied the following test: I put one-half of the evaporated residuum into my left eye at 1.30 p.m., the introduction being followed by some smarting, tingling and lachrymation which, however, passed off in half an hour. At 3 p.m. I found the pupil dilated to its fullest extent and at midnight it was still in that condition. In the morning the dilatation was not so marked, and it gradually diminished until the pupil became normal 36 hours after the introduction of the agent. The chemical tests for those active principles that dilate the pupil are very unsatisfactory, so much so that the microscope is usually appealed to in preference. In this instance there was not enough of the agent to test it chemically, even if it were desirable. The remaining half of the film was dissolved in sulphuric acid and allowed to crystallize and at

the same time, for purposes of comparison, a weak tincture of stramonium was put through the ether process and similarly treated by means of hydric sulphate. The crystals obtained from the urine, though few in number, are well shown under the microscope, and allowing for the difference in the strength of solutions from which they were obtained the single prismatic crystals and clustered groups of needles on one slide will be readily identified with those of the other. Although the evidence obtained by the methods of which I have just spoken—the first giving proof of the patient's having taken a mydriatic poison and the latter demonstrating its existence as a crystallizable alkaloid or salt of an alkaloid, and showing its crystalline form—though these matters are settled, I do not consider it by any means positive proof of the exact nature of the vegetable poison; and for these reasons: In the first place it is not definitely decided by authorities what the shape of daturia crystals is, or even whether the alkaloid is not found in more than one crystalline form. Both Guy and Taylor say it is usually found in long colorless four-sided prisms and clusters of needles—just the condition of things you will observe under the two microscopes here—but Taylor ("On Poisons," page 743) mentions a case where the daturia assumed the form of pentahedral or polyhedral plates, instead of quadrangular prisms. Hyoscyamia and atropia, both of which dilate the pupil, have been found in one or other of these shapes.

But a far more serious argument against the assumption that the microscope is capable of determining the vegetable origin of mydriatic crystals is our positive lack of knowledge concerning the nature of the active ingredients of the poisonous solanaceæ. It is not yet definitely settled, for instance, whether daturia is the only active alkaloid in the thorn-apple, or indeed whether daturia is not simply hyoscyamine or a modified form of atropia itself. Attfeld thinks it is either identical with or a modification of atropine. E. Schmidt in the journal of the Berlin Chem. Society for May, '81, asserts that the seeds of stramonium contain not only daturine but atropine and hyoscyamine. Ladenburg, in the same periodical for Sept. '80, says that hyoscyamine and atropine, though readily convertible, the one into the other, are decidedly different, but wherein this difference lies has not yet been discovered. Regnaud and Valmont, giv-

ing the results of an extensive examination of these alkaloids in the *Journal de Pharmacie et de Chimie* for July '81, conclude as follows: the atropine of medicine is a mixture in variable proportions of two isomeric crystalline alkaloids possessing the same therapeutic properties. One of these is atropine (*a*) (the atropine of Ladenburg)—the other atropine (*b*) or preferably atropidine, which is the hyoscyamine of Ladenburg. Atropidine exists in such abundance in belladonna that it forms about two-thirds of the crystalline atropine of the (French) codex. It is the crystalline alkaloid of all the mydriatic solanaceæ and of *duboisia myoporoides* and has been improperly named duboisine and daturinæ.

I think it must follow from these considerations that until we are better acquainted with the exact chemical and physical properties of their active principles, an examination of the urine alone will fail to determine which plant, in a given case, has been the source of the poisonous alkaloid,—and that although the symptoms, chemical and physiological tests, together with the microscope, may serve as valuable corroborative evidence from a medico-legal standpoint, the finding of the parts of the plant in the intestinal canal, or in evacuations therefrom, is the very best proof one can have.

THE ADMINISTRATION OF CHLOROFORM.

BY A. B. ATHERTON, L. R. C. P. & S., EDIN.,
FREDERICTON, N.B.

As there is no subject of more importance to every medical practitioner than the best means of guarding against the danger of death from chloroform, I may be pardoned for referring to the discussion which occurred at the last meeting of the Canadian Medical Association, in which the majority of the speakers seemed to favor the opinion that *syncope* was in most instances the cause of the fatal issue. I at that time took the position that such was not the case, but that it was generally due to *asphyxia*, and that one reason why the stoppage of respiration was not noticed was, that too much attention was bestowed on the pulse. Of course I do not mean to affirm that the heart is never seriously at fault in death from chloroform, but I do say that, in at least nine cases out of ten,

when trouble arises with persons who have no marked disease of that organ, the trouble comes from some interference with respiration. Nor can I now recall a single instance in which anything alarming occurred unless the *breathing* was at fault.

We all know that in many cases, the respiration under chloroform administration is carried on so noiselessly, that without the closest scrutiny in a good light it may become embarrassed and cease without one's notice. Again, the respiratory muscles sometimes act so as to cause movements of the chest walls, while the air is prevented from entering the lungs by closure of the larynx. And if one is not well on his guard, such action may be mistaken for good respiration, and the patient be allowed to go on till secondarily the heart ceases to beat and death occurs, which is then naturally attributed to syncope. In the 1877 edition of Erichsen's surgery, page 22, it is stated that Lister believes "that many of the deaths from chloroform in which the heart has been said to stop first were cases of this kind." I have often suspected too, that the very natural desire to escape blame has sometimes materially aided the microscope in detecting some fatty degeneration of the muscular fibres of the heart, which one sees frequently reported as having been found at the autopsy.

I have had my attention very forcibly directed to this subject since the late meeting of the Association, by a circumstance which occurred a few weeks ago in my own practice, and which is in part my reason for again addressing you in regard to the matter. I was operating on a patient while a younger member of the profession was holding the chloroform towel, and just as I finished the operation I noticed that respiration was not going on well, and it was with a good deal of difficulty that it was re-established. The Dr. remarked to me that he had hold of the pulse all the time, and that it had pulsated all right; and I doubt not he spoke the truth, for as soon as I dare take the time to examine it, I found it strong, full, and regular.

It is sometimes asserted, when one of these unfortunate deaths from anæsthetics occurs, that no *one* man should attempt to do any operation and at the same time give the anæsthetic. Now, while this may be possible in hospital practice, or in a large city, it is practically out of the question in country districts, and often so in small towns. How can it be expected that every time a dentist

or practitioner of medicine requires to administer an anæsthetic, he must call in the assistance of another skilled person to aid him? It is not always the case that medical men are so very friendly that they can call upon each other at a moment's notice for such services, and even if such were secured, it would generally be difficult to obtain from the patient an extra fee for them. And here it is that the advantage of attending to the respiration alone, shows itself more conspicuously even than in cases where a second man can be had to assist one. We can readily use our *eyes* to observe the breathing occasionally, while a tooth is being extracted or some other minor operation performed, but we could not so well spare a *hand* to feel the pulse.

Finally, at the risk of wearying your readers or of appearing egotistical, let me adduce some arguments in favour of the operation of opening the windpipe as a *dernier ressort* in cases of chloroform poisoning. In all such cases, where the less severe means have failed to bring the patient back to a condition of safety, it is of course of the utmost importance that no time should be lost in the application of our remedies; and on this account I maintain that tracheotomy (or laryngotomy as the case may be) is preferable to the application of boiling water to the chest or the use of the battery. For it is not always that hot water can be had at a moment's notice; neither is a battery often going by the patient's side, nor is it always even present or in good working order. Then, again, as in the case reported by me in the number of the LANCET for June, 1881, the assistance of a second person who can start your galvanic apparatus is frequently not at your immediate command. Furthermore, is not the lividity you get in chloroform asphyxia of such a pale whitish character that it may easily be mistaken for syncope, and lead one to neglect the use of a remedy for the restoration of breathing because he thinks it is the heart that needs to be excited to action. I know that in my own case the colour of the man's face was much like the pallor one gets in the last stage of diphtheritic croup, or perhaps more like that of death itself; and I am quite sure that I could not have told from *it* whether his case was one of asphyxia or syncope, until I made the incision in the neck and found a copious flow of venous looking blood from the wound.

It may be urged against the operation, that in the first place, every one can not be trusted to undertake it; secondly, that a tracheotomy tube (like the boiling water or battery) is not always at hand; and thirdly, that it is too serious an operation to be often or hastily done. In answer to the first objection, let me observe that it is almost always (if not always) in persons beyond the age of early childhood that trouble occurs, and in such the windpipe is generally easily reached. As to the necessity of a tracheotomy tube, it could in my own case have been dispensed with as a pair of forceps to hold open the wound for a moment or two till breathing became good through the mouth was all that was really needed. If, however, artificial respiration should be required, a suture in each lip of the wound in the trachea could be utilized to ensure the free ingress and egress of air, and that too without the assistance of a second person to draw forward the tongue or lower jaw, as would be necessary in an ordinary case. Finally, as to the serious character of the operation itself, every one knows that *per se* it is neither dangerous to life, nor does it lay a person up for a long time. I operated on my patient on Saturday morning, and on Monday afternoon he walked a mile, crossing the river on the ice, and on the following morning got on board the train and went home, a distance of more than 100 miles. In a few days the wound was quite healed.

Taking everything into consideration then, I submit that in no case of threatened death from an anæsthetic should we neglect, as a last resort at least, to try opening of the windpipe, and if need be, artificial respiration through the opening. For it may be that in spite of the drawing forward of the tongue or jaw, the free entrance of air may be prevented by spasm of the larynx or some other obstruction.

EXOPHTHALMIC GOITRE TREATED BY ERGOT.

BY J. STEWART, M.D., L.R.C.P. AND S., EDIN.,
BRUCEFIELD, ONT.

[Read before the Canada Medical Association at Halifax.]

CASE I.—Miss W., aged 35, when seen for the first time in June, 1875, complained of a severe pain in each eye-bail, with dimness of vision. She

also complained of palpitation of the heart, and enlargement of her neck.

Past History.—She says she enjoyed excellent health up to her first menstrual period, which took place when she was only 11 years of age. She lost a great quantity of blood at this time. From her twelfth to fourteenth year the catamenia were irregular—sometimes once a month, sometimes once in four or five months. From this time up till the present she had menstruated very regularly every six weeks. She had been troubled with palpitation of the heart for eight years. Seven years ago she had pneumonia, followed by acute rheumatism. The latter assumed an intermittent character.

Family History.—Her father died at 60, from typhoid fever; mother at 45 from paraplegia, due, it was said, to softening of the cord. She lost a brother from dysentery, one from cerebro-spinal meningitis, a third from consumption, and a fourth was accidentally killed. Her only sister died from consumption. She is the sole survivor of a large family.

The history of the present attack dates from the month of October, 1874, when she began to be wakeful and nervous at night. After these symptoms had lasted for six weeks her eyes were noticed by a friend to be more prominent than usual. At this time her eyes were very painful. The pain was deep-seated, and extended back to the occiput. Her neck was enlarged and she had a constant inclination to swallow. Shortly after the appearance of the latter symptom she says the neck increased rapidly in size, and she was troubled very much with throbbing in it.

Present Condition (June, 1875.) There is a very marked prominence of both eyeballs, and abrasion of the cornea—this latter evidently due to the inability of the lids to cover the corneæ. There is a marked enlargement of the thyroid body, especially of its right lobe. The pulse is said never to be below 120, and on the least exertion it beats as high as 150 or 160. A systolic murmur, loudest over the base of the heart, is heard. Belladonna was given to her at this time for about two months, and seems to have had some effect in diminishing the exophthalmos, but with little or no effect on the other symptoms. During a visit to the United States she stopped the belladonna and took strychnine, and in such doses as to cause severe symptoms of poisoning. She was not benefitted in the least by

the strychnine, and on her return to Canada I put her under ergot, commencing with ten minim doses of the fluid extract three times a day. She was not taking this long before it was apparent that there was quite a diminution in size of the thyroid and less protuberance of the eyeball; but it was on the pulse that the beneficial effect was first seen. From a pulse constantly at about 140 it was reduced in a few weeks to about 100 to 110. This improvement continued steadily until the pulse came down to between 80 and 90. Simultaneously the eyeballs lost their prominence, and the thyroid underwent great diminution in size. She continued taking the ergot for a year, the dose of which was increased to fifteen minims three times a day during the last three months of this period. At the present time (July, 1881,) she is perfectly free from all symptoms of her troublesome affection.

CASE II.—Mrs. M., aged 32, married, two children, youngest aged 18 months. When first seen, in June, 1880, she presented all the characteristic symptoms of exophthalmic goitre in a pronounced degree, including the want of consentaneous movements between the eyelids and eyeballs.

Her family and previous history are unexceptionable. It was four years ago that she felt the symptoms of her present trouble in the shape of nervousness, weakness, and palpitation of the heart. For six weeks previous to the appearance of these symptoms she was much worried mentally, and overworked physically in nursing a child who had been ill with bronchitis and catarrhal pneumonia. It was soon afterwards noticed that her eyeballs were more prominent than they naturally were. Her husband "wondered why she stared so at him." About the same time appeared enlargement of the neck, principally on the right side. She continued in this state, now better, and now worse until I saw her in June of last year. Her pulse was constantly found to be 120, and on the least exertion it ran up to 150 and over, and she complained of great palpitation of the heart. She had been taking iron and digitalis for months, but without the least sign of improvement. She was ordered fifteen minim doses of the fluid extract of ergot, three times daily. She had not been long under this treatment when it was found that the pulse had been reduced to 100, and there was less palpitation of the heart. She could undergo exertion better, and expressed herself as feeling much

improved. The next symptom found improved was the motions of the eyelids, which now followed the eyeballs, but still tardily. Then came reaction of the eyeballs and later diminution in the size of the thyroid body. She continued taking the ergot until three months ago, when she expressed herself as feeling so well that she thought it was unnecessary for her to continue the treatment any longer. On examination at this time the pulse was 80, there was no exophthalmos and the thyroid was normal in size. At the present time she is in excellent health, and no symptoms of her former trouble are to be detected.

CASE III.—Mrs. S., aged 29, married, five children, youngest aged five. Consulted me in January of the present year, complaining of weakness, violent palpitation of the heart, and œdema of the lower extremities. Family and previous history good. Six months previously the first symptoms of her present trouble showed themselves. She commenced to feel weak, and her heart beat violently on the least exertion. The eyeballs became protuberant and she complained of having much pain in them. The thyroid enlarged very rapidly. When first seen the enlargement was very extensive, and she was greatly annoyed from "an almost constant beating in her neck and noises in her ears." She expressed herself as unable to go upstairs, on account of the violent palpitation and a sense of suffocation. The exophthalmos was extreme enough to prevent the lids from protecting the corneæ, and the latter, in consequence, were found abraded. Von Graefe's symptom was well marked. The pulse was found to be 140 and irregular. A loud systolic murmur, having its maximum intensity in the cardiac region, was heard. The lower extremities were œdematous. She commenced taking fifteen minim doses of the fluid extract of ergot three times daily, but in a few days this treatment was interrupted by a severe attack of pneumonia, from which, however, she made a good recovery. She has been taking the ergot now for about five months, and is still continuing it. She was examined on the 22nd of July, and it was found that she had much improved. The exophthalmos and goitre are both much less. She is not troubled now with pain in the eyeballs, beating in the neck or noises in the ears. Her pulse is 88, and active exercise has not any more influence in increasing it than it has in the normal state. The

œdema of the lower extremities has disappeared, but the mitral murmur still persists. She says that she feels well, and does not consider herself an invalid. When this patient first came under observation an unfavorable prognosis was given, on account of the severity of the symptoms, and the complication with what then appeared to be an organic disease of the heart, but judging from the late intermittent character of the murmur is likely functional. The pulse is still irregular and presents evidence of high tension.

A fourth case of exophthalmic goitre has come under my observation, but its onset was so sudden and its duration so short, I consider that the ergot which was given had but little to do with the result. It occurred in a girl, aged 18, who received a very violent shock in witnessing the sudden death of her brother, who was considered to be at the time convalescent from a mild attack of diphtheria. The disease made its appearance in this case in one night, and when seen the following day she presented a good example of a typical exophthalmic goitre. In about ten days all the symptoms had disappeared.

GENERAL RULES FOR THE GUIDANCE OF EXPERTS IN CASES OF SUSPECTED POISONING.—CIRCULAR OF THE MINISTER OF GRACE AND JUSTICE.

Translated from Rivista Sperimentale di Freniatria e di Medicina Legale, Reggio Emilia, Italy, 1881.

BY JOSEPH WORKMAN, M.D., TORONTO.

"The Commission constituted by Royal Decree of 11th April, 1880, for the purpose of studying the very grave questions related to evidence in alleged crimes of poisoning, and to the special characteristics of cadaveric poisons, has, in accordance with my request, suggested certain general rules which should be observed by the Judges and the experts, in order that the most important elementary facts, from which the proofs of the crime may be inferred, may not be lost.

"I now hasten to summarize these rules, to which I request the attention of the Attorney-General of the King, and the Judges.

"The Commission has deemed it proper to state primarily that it is of the greatest importance,

as soon as the first suspicions of poisoning have arisen, that with all possible care and diligence, all the most particular facts relating to the progress and the morbid symptoms preceding death should be collected; for whilst the memory of these is fresh it is not difficult to succeed in this, but at a later period it is unusual to do so, unless incompletely and by means of ambiguous depositions, in consequence of which the judge is deprived of a very important criterion as to the true character of the case

"I regard it as his duty to recommend, with the utmost insistence, the adoption of such measures as may secure the better selection of medical experts to be entrusted with the first operations, exacting in them such guarantees of capability for the performance of their special work, as cannot be possessed, and indeed are but indistinctly possessed in general, by those who have attained to the doctorate in medicine and surgery. This is an error of omission in the primary researches which may result in irremediable loss of proof of the actual crime, and may open the way to the most unjust conclusions.

"Having premised so much I now submit the most important recommendations which, in the opinion of the Commission, should be considered by the magistrates and the expert dissectors; it is, however, to be understood that those ulterior proceedings, which the progress of the studies on the generic proof of poisoning, and chiefly on the fact of the formation of cadaveric poisons, which may appear necessary, are to be reserved, as well as the others which the peculiar characteristics of the cases may suggest to the said experts.

The Instructions to Experts.

"1st. The inspection and the section of the body should be made as soon as at all possible after death. Not only should the cavities of the thorax, abdomen and cranium, but also the vertebral canal be opened. The conditions of each viscus and tissue, and of the blood ought to be diligently examined, and the aid of the microscope should be availed of when necessary.

"2nd. For the preservation of the viscera and other substances to be subjected to chemical examination, well closed glass vessels, new, with ground stoppers, and not before used for any purpose whatever, and washed out with water and alcohol mixed, are to be employed.

"3rd. To the viscera and other substances placed in these vessels, there should be added as much alcohol as will, in excess, cover the solids. For liquids to be preserved half a volume in excess of that of such liquids will suffice, provided the alcohol be of the strength of 95 to 98 per cent; but if the strength be lower about one-fourth additional will be necessary.

"4th. Only chemically pure alcohol is to be employed, that is to say, previously redistilled, and deprived of every foreign substance.

"5th. In every case not less than half a litre of the alcohol employed is to be preserved separately in one of the glass vessels described, for the controlling chemical researches.

"6th. In another of the glass vessels the entire brain and spinal cord will be preserved.

"7th. In a third, both lungs, the heart, spleen, kidneys, and the urinary bladder (after being emptied of its contents), and as large as possible, a quantity of blood from the centre of the heart and the great vessels, will be placed. In this vessel may also be preserved the matters which have escaped into the thoracic cavity.

"8th. The urine is to be preserved separately in a fourth vessel.

"9th. After application of proper ligatures the stomach and the small intestines are to be removed, successively opened, and their contents put into a fifth vessel, in which the stomach and intestine themselves shall also be placed, not, however, until after having instituted on each a most diligent examination, in order to discover whether there are any anatomo-pathological alterations; this intimation will also apply to every other viscus and organ. In this vessel the matters gathered from the abdominal cavity, when there are such, may be preserved.

"10th. In like manner is the large intestine with its contents to be treated, and to be preserved in a sixth vessel, and in case of the exhumation of a body, the excrement or deposit that may be found on the bottom of the coffin, may be placed in the same vessel.

"11th. In a seventh vessel the entire liver will be preserved.

"12th. A good portion of the muscles detached from the body, so as to avoid as far as possible including any of the adipose panniculum of the skin, will be placed in an eighth vessel. When

it may happen that there is not at command a vessel of the required size, two may be employed instead of one. This observation will also apply to the substances mentioned in No. 7.

"13th. In special instances of the presence of traces of blisters, sores, fistulous sinuses or wounds, which may have been the possible passages of poison entrance, a portion of the tissue of the part should be removed, and preserved in another vessel. Particular parts injured in the buccal cavity and the pharynx, may indicate the nature of the suspected poison.

"14th. There should, in case of exhumation, be preserved in another vessel a sample of the earth surrounding the coffin, when the nature of the suspected poison may suggest the advisability.

"15th. Lastly, the dissecting expert is recommended to use the precaution of making deep and numerous incisions into the parenchymatous viscera and the muscles, before placing them in the vessels, so that the alcohol may readily penetrate them as far as possible.

"I commend to the judicial authorities this highly important subject, and I feel convinced they will not fail to conform to the recommendations and precautions above indicated.

"Firm. Il. Ministro,

"T. VILLA."

"ROME, 20th Feb., 1881.

*Remarks:—*We imagine that but few of our readers will aver that the preceding instructions of the Italian "Minister of Grace and Justice" (God save the mark!) fall short in exigent minutiae. Though many of the suggestions (or commands) seem to be very appropriate, we fear the carrying of them into effect will be attended with more difficulty than the framers of them may have forecast. We certainly should not have so much faith in their technical observance in this country as to advise the introduction of the whole of them by our Attorney-General, unless he should bring up his ministerial courage to that measure of "Grace and Justice" towards medical experts, which hitherto he has not been able to reach. The editor of the *Rivista Sperimentale* informs us that he was not favoured by the Minister with a copy of the instructions, but by a legal friend, who wrote to him, stating, amongst other matters, that he considered the tariff of fees allowed to experts too low.

Here, then, was a *rarissima avis in terra*, a lawyer advocating better pay to doctors. We wish we could import a few of his feather into this Canada, under the hope that they would multiply, and teach our songsters of the bar, the bench and the legislature, a better style of music, and a higher order of grace and justice towards our body.

LACERATION OF THE CERVIX.

BY J. E. BROUSE, M.D., BROCKVILLE, ONT.

Never having seen, in any of our Canadian medical journals, a case reported of the above lesion, I cannot avoid believing that the great importance of the subject is not fully recognized by the profession in Canada; for if it were, there would scarcely be a monthly issue that would not contain a history of one or more cases. I do not expect to awaken much interest by the present communication, only hoping to induce at least a few of the profession to give this, not infrequent accident, more earnest attention.

The celebrated gynæcologist, Dr. T. A. Emmet, was the first to point out this lesion and to institute the operation for its repair. I have had the privilege of seeing Dr. Emmet operate on at least one dozen women for restoration of the cervical canal, and can bear witness to the great and, in the majority of cases, entire relief given. Dr. Emmet states, in his work, that 32.80 per cent. of all women who had passed under his observation and had been impregnated were found to have laceration of the cervix; and it has been fully demonstrated that nearly, if not, all cases of mis-called ulceration (erosion in reality) of the os, with profuse leucorrhœa and enlarged mucous follicles occurring in women who have borne children, have their origin in this lesion. It is only in very recent years that laceration has been diagnosed from ulceration and the early stages of epithelioma and corroding ulcer, and the mistake is yet only too common, for are we not constantly hearing of women who are the victims of ulceration of the womb when there is in reality no such disease of a non-malignant nature? I attended a lady the past year who was told by her previous medical attendant, who treated her for several weeks with Chian Turpentine at \$5.00 an ounce, that she had cancer of the cervix, (he diagnosed it

by the smell of her breath) when she had merely a slight laceration with erosion and was cured in six weeks.

It is not needful for me to enlarge on the importance of diagnosing and treating this lesion, as anyone who has read the works of either Emmet or Thomas cannot fail to be deeply impressed with the fact that it is a most prolific cause of nervous disease and neuralgia in child-bearing women.

October 15th, 1881, I was consulted by Mrs. T——, who gave the following history:—Age, 34; seven years married; has had four children; no miscarriages. First labor protracted, instrumental delivery; second labor easy; third, instrumental. The fourth, which occurred in August, 1880, was extremely rapid, and followed by a larger blood discharge than usual, the flow continuing quite freely for three weeks. Does not remember at what age menses first appeared, but was regular from the first, and had no pain before, during or after periods. Is always unwell while nursing. Since her last confinement, her health, which up to that time had been good, has become very bad indeed. She has neuralgic pains all over the body, at times of so severe a character as to drive her nearly distracted. Often the pain is dull and aching, as though she had been beaten. The menses are not as regular as formerly, coming on more frequently and lasting from five to seven days. She now has great pain in sides, hips and legs before, during and after the flow. Her complexion is pale, dark under the eyes; face has a worn, tired appearance.

On examination, found the uterus low down in the vagina, the fundus lying in the hollow of the sacrum, and the cervix lacerated bilaterally to vaginal junction, much everted, and eroded with mucous follicles enlarged. A profuse discharge, of a dirty grey appearance, bathed the cervix, the everted lips of which were fully two inches wide. On passing the probe, the uterine cavity was found to be two and one-fourth inches in depth, and when the cervical flaps were brought into position, by a tenaculum in either one, the depth from os to fundus was three and one-half inches. The preparatory treatment was at once begun by applying Churchill's tr. iodine to the erosion twice a week, and ordering the use of copious hot water injections night and morning in the recumbent posture, at the same time endeavoring to improve the gen-

eral health as far as possible by appropriate medication.

Nov. 15th, the erosion having healed I operated for the restoration of the cervical canal, assisted by Dr. Vaux, of Brockville, Dr. Jackson giving the chloroform, and my nurse bringing the parts into view with Sim's speculum. She took the chloroform kindly, and although under its influence one hour, not more than half an ounce was given. I need not describe the operation, merely stating that it was done as it is so clearly and admirably detailed by Dr. Emmet. The case progressed without the slightest bad symptom, and after the second day the vagina was washed out with carbolized warm water night and morning. The sutures were removed Nov. 23rd, but she was kept in bed, not even allowing her feet out, for fear of cellulitis, for two weeks longer. When the parts had firmly united and all tenderness on pressure gone, I passed the sound and found the depth from os to fundus to be two and one-half inches.

Before the operation there being no *cul de sac* for a pessary to lie in, it was not possible to keep the uterus in position, but now there was no difficulty in doing so, and she went home Dec. 15th wearing a nicely fitting Smith pessary and very much improved, not only in general health, but in all her nervous and neuralgic troubles. I have not heard from her directly since, but her husband told a neighbor of his that she was better than he thought it were possible for her ever to become.

That the bad results arising from this lesion may be, in a great measure, prevented, I have no doubt, were more care taken in cleansing the vagina with warm carbolized injections every day after confinement for at least three weeks, at the same time keeping the patient in bed. But so long as the acrid lochial discharge is allowed to flow over and constantly bathe the torn cervix, it is impossible for repair to take place, and when the lochia cease the woman is usually allowed to get up, and the womb, being large and heavy, gradually falls lower and lower, crowding the torn cervix on the vaginal walls, thereby producing eversion and effectually preventing union. Then follow in due course those functional nervous disorders and neuralgic troubles which render the lives of so many of our fruitful women a burden to themselves and an anxiety to their friends.

Correspondence.

ELECTRICITY IN SPASMODIC STATES.

To the Editor of the CANADA LANCET.

SIR,—I wish to offer a few remarks in reference to the article of Dr. A. M. Rosebrugh, in the last issue of the LANCET (p. 129), in so far as the same relates to the use of electricity in the treatment of spasm. The conditions of Writer's cramp and wry neck are there especially referred to, as well as spasm in general, with sundry details from leading writers as to the mode of application, etc., conveying to the reader the impression that electricity has really been proved to be a curative agent in spasmodic states.

The facts are, on the contrary, that electricity has proved a noted failure in this very class of cases; for the proof of which no better evidence can be asked than the following from J. Russell Reynolds, M.D., F.R.S., in his "Clinical Lectures on Electricity," p. 102. He says: "The forms of spasm in which electricity has been most commonly used are torticollis, a spasmodic condition of the muscles of the neck on one side; writer's cramp, and so-called histrionic spasm of the face. It is said that such cases have been cured, but my own experience has been unfortunate in regard to them. I have tried electricity again and again, in every individual form, but I have never seen it do any good. I have tried battery currents, direct and indirect; I have tried faradization weak and faradization strong, with wet sponge and dry; I have used static electricity also, and each form of electricity persistently. I have not given up because the treatment has done no good at first; but I do not know one single instance in which it ever seemed to do the smallest good." The same eminent observer, writing of chorea says: "In my judgment, the less one says in the present state of knowledge about chorea and its treatment by electricity, the better will it be for therapeutic science." (*Id.* p. 82.)

In view of this strong testimony, the question will arise, how it is that Drs. Beard and Rockwell, and Dr. Bartholow can have been referred to so pointedly by Dr. Rosebrugh, in apparent support of a doctrine the very opposite? As regards the former, it may be said, that at the time their book was written, they were endeavouring to raise the

use of medical electricity from obscurity and even opprobrium into general favor; they entertained glowing anticipations of its future usefulness when methodically applied; and it was perhaps pardonable, if in isolated sentences, they appear to have drawn on those anticipations. But in reality they have bestowed very little commendation on the use of electricity in the treatment of spasm, and in the cases they furnish, they do not profess that a single one has really been cured by it. The few cases they have to offer were "improved" or "benefitted" etc., which might be accounted for by rest and the other concomitants of treatment. Writing of "muscular contractions" and their treatment by electricity, they say: "The prognosis is usually unfavorable for all, except the rheumatic cases."

As for Dr. Bartholow and his assertion, as stated by Dr. Rosebrugh, that "there is no fact in regard to galvanism more conspicuous than its power to allay spasms," I can do no better than quote, for the benefit of the readers of the LANCET, the estimate placed by the *N. Y. Medical Record* (September 3rd, 1881), on "our prolific author's latest production"—his treatise on electricity: "But even the student should not too implicitly rely on the positive assurance of the value of electricity in the numerous diseases for which it has been recommended. He should remember that the present book emanates from an optimist in all matters therapeutical. No one of course would to-day wish to dispute the great utility of electricity in some conditions of organic disease or functional disturbance. But one rises from the perusal of Dr. Bartholow's treatise with the conviction that the author expects rather more from electricity than would seem to be justified from well authenticated facts."

This, I think, is all that it is necessary to say in justification of the position here taken. What has appeared to render these remarks necessary is probably due to an oversight on the part of Dr. Rosebrugh, whose error, if such it be, passed muster before so astute and learned a body as the Toronto Medical Society (before whom the paper was read).

Yours, etc.,

THOMAS W. POOLE, M.D.

LINDSAY, Jan. 5, 1882.

Selected Articles.

FOUR CASES OF HEPATOTOMY.

August 15, 1880, Miss E. G., æt. 37. Between 1870 and 1872 she broke down in health, suffered from obscure symptoms of which she can now give no very clear account, but which were referred, by three practitioners, to the spine. In 1872 she consulted the late Mr. Carden, of Worcester, who diagnosed some hepatic mischief, but gave no decided opinion. In 1873 she had a severe inflammatory attack, the symptoms of which were regarded as being due to diaphragmatic pleuritis. That illness continued three weeks. Since then has never been well, suffering from bilious attacks, swollen legs and feet, dyspepsia, inability to walk and great mental depression. She asserts that the right leg has always been more swollen than the left. In 1876 her friends noticed an alteration in her size, she had to have her dress let out, her breathing became interfered with, and an enlargement on the right side became apparent. This increased slowly till 1879, when it was evident that the whole of the right chest and abdomen were enormously increased in size, but it was not till February of this year that any attempt at diagnosis seems to have been made, and the opinion then seems to have been that the enlargement was due to malignant tumor. In July she came under Dr. Pike's care, and he diagnosed it as a case of hydatids of the liver. Dr. Pike and Mr. Dawson aspirated the tumor August 11, and withdrew a few teaspoonfuls of clear serum, enough to establish the correctness of the diagnosis of multiple hydatids even though they could find no scolices in it. On the 15th I found her in such a condition that it was evident death from suffocation and exhaustion was imminent. She was propped up in bed to relieve her breathing, and was vomiting incessantly. Was extremely emaciated, had a hay-like odor of her breath, pinched features and yellow skin, and all the symptoms of extreme exhaustion. The hepatic dulness extended from the third rib down to umbilicus, crossing the middle line to the left all the way for about two inches, and much more at the lower margin. The whole of the right side was occupied by the tumor, no air was entering the right lung, the left was greatly interfered with, and the heart was pushed much over towards the left. Below the right ribs distinct fluctuation could be obtained over the tumor. I had no hesitation in proposing abdominal section. August 16, performed the operation; Dr. Pike gave ether. I made an incision four inches long and about two inches to the right of the middle line, beginning at the edge of the ribs, and inclining slightly inwards towards the umbilicus. Having carefully secured all the bleeding points, I opened the peritoneum,

and found that there was no adhesion of the liver to the wall, and that I had exposed healthy liver tissue. Into this I passed a large sized aspirator needle, and evacuated a few teaspoonfuls of clear serum. Removing the needle I passed my knife into its track, and made an opening large enough for my forefinger. I then found that the layer of liver tissue was from half an inch to three-quarters thick. I then fixed a pair of Kœberle's catch forceps on each of the margins of the wound in the liver, and asked my assistant gently to draw them up as I enlarged the incision. This I did to the extent of about three inches, and the moment I freed my finger, myriads of transparent globes of all sizes, from a pea to an orange, shot out, covered the table and floor, and were afterwards picked off the floor all over the room. When the tension was relieved, I dug them out with a large silver gravy spoon, and this process took much more time than the whole of the rest of the operation, and during its performance, Mr. Harmar most skilfully prevented any cysts entering the peritoneal cavity, by keeping the flaps of the liver close against the abdominal wall. Finally, I perceived that my gravy spoon was causing some hæmorrhage from the inside of the cavity which had no kind of lining membrane, and I had to leave a considerable quantity of cysts in the cavity. In the cut surface of the liver, two bleeding points gave me some anxiety, but I closed them temporarily with Kœberle's forceps, and finally secured them in the stitches. These I applied by a common short needle and piece of silk in the continuous method, fastening the wound in the liver, through the whole thickness of the tissue, to the wound in the abdominal wall, so as effectually to close the peritoneal cavity; I then fastened in a wide glass drainage tube eight inches long. The quantity of hydatid cysts evacuated was estimated at two gallons.

Patient rallied well and seemed to suffer nothing from shock. Her sickness ceased immediately after the operation and did not return, and her breathing became at once relieved, so that she could lie flat on her back, or on either side.

I saw her again on the 19th, without a bad symptom, eating well, entirely free from pain, and with the hepatic dulness contracted to almost normal limits. A large number of cysts had come through the tube daily with the discharge, which was finally tinged with bile. Dr. Pike washed out the cavity twice a day with weakly carbolic water. Fragments of cyst continued to come away for about a month, and now (October 17) there has been hardly any discharge at all for a fortnight, and nothing remains but a sinus.

Dr. Pike notes that one day during the syringing out of the cavity, she had a sharp, sudden pain passing round from right to left. This lasted some three or four hours, and after that about half

a pint of bile was passed from the wound, and the pain gradually ceased. The patient herself writes that she feels now quite well, and is able to walk about alone, not quite eight weeks after the operation.

I have only to say that Listerian precautions had no share in the success of the operation. All their formalities were carried out with the assistance of plain cold water, and a spray of about one in a hundred, which most of the time was not on the wound. Since then I have employed water only for the spray, without carbolic acid at all, and my results have been quite as satisfactory as with Listerism.

2. J. D., æt. 56, Feb. 5, 1881. Dr. Hadley favoured me with the following notes: He saw J. D. August, 1879, when he had an attack of severe illness which was regarded as due to the passage of a gall-stone. In January, 1880, a large tumor was discovered occupying the whole of the epigastrium, right hypochondrium, and extending downwards into the right iliac region. The tumor had an indistinct fluctuation. During 1880 the patient became greatly emaciated, passed generally clay-colored stools, and frequently had his urine deeply tinged with bile. In December, 1880, the cyst seemed to find an opening into the intestine, for the tumor became greatly diminished in size, and the patient passed large quantities of brick-red fluid from the rectum. After this discharge the cavity seemed to refill in a few days, and the process was repeated at intervals. In January, 1881, the process of emptying seemed to cease, and it was proposed to tap the cyst, but on account of the presence of intestines all over the front of the tumor it was deemed more prudent to have an exploratory incision made. Feb. 6, I performed the following operation, the ether being administered. I made an incision about three inches in length over the tumor in the axis of the right rectus muscle, and about three inches to the right of the middle line, beginning about two inches above the level of the umbilicus. The peritoneum was easily reached, but there I found intestines and omentum glued everywhere over the surface of the tumor, and I had to exercise much care in dissecting them off so as to clear a part of the cyst about two square inches in area. There was, however, no adhesion between the parietal layer of peritoneum, and the subjacent intestines. I then passed my small sized trocar into the tumor and evacuated seven and a half pints of dark bilious colored fluid. When the cavity was emptied completely I enlarged the opening made by the trocar so as to admit two fingers, and came at once upon a loose mass which I removed, and which proved to be a slough of liver tissue weighing about one ounce. I then stitched the edges of the wound in the liver to those of the wound of the abdominal wall, and fixed in a glass drainage tube. The cyst was

clearly the liver itself which had been distended into a shell with apparently a pretty uniform thickness of about half an inch. The fluid removed was carefully examined by Dr. Saundby, the pathologist to the Woman's Hospital, and found to consist of nearly pure bile mixed with pus.

No effort was made to conduct the treatment upon Mr. Lister's principles. The glass drainage tube was left in for about a fortnight, and then a piece of rubber tube replaced it. The temperature and pulse curves were almost normal, patient's appetite rapidly improved, and March 30th there was very little discharge from the drainage tube, and he had gained 14 pounds in weight in seven weeks. (P.S.—He has gained 42 pounds since the operation, September 16).

3. L. B., æt. 25. She had been married four years, but had never been pregnant. Her illness began with a sudden attack of pain at the seat of the swelling, in September, 1880, and since then the tumor had steadily grown. The nature of the tumor was doubtful. It was in the position of the right kidney, was movable but had an attachment above, which suggested an origin from the liver. No distinct fluctuation could be discovered in it. February 9, I made an abdominal section, and found it to be a hydatid tumor of the liver, which had no adhesion to the abdominal wall. I opened the capsule, which consisted of a layer of liver tissue, about one-fourth of an inch in thickness, and scooped out the hydatids with a dessert spoon. They were of various sizes, from a pea to a small orange, and amounted in all probably to a pint and a half or two pints. I was very careful to cleanse out the deep cavity in the liver very thoroughly, and Mr. Harmar very skilfully kept the edge of the hepatic wound up out of the abdomen, so that none of the parasites escaped into the peritoneum. The wound in the liver was stitched to the wound in the abdominal wall, and a glass drainage tube was fastened in. The after progress of the case was uninterrupted recovery, no effort being made to conduct its treatment on Mr. Lister's principles.

4. E. P., æt. 21, unmarried, August last, for an abdominal tumor. This I recognized at once to be an enlargement of the liver, and unhesitatingly made a diagnosis of hydatid disease. Her illness began in April, 1880, with an attack of violent bilious sickness, followed by pain in back, and right side. The enlargement was noticed within six weeks, and had steadily increased. Suffered from repeated attacks of violent bilious vomiting. The hepatic dulness extended from the fourth rib down to an inch below the level of the umbilicus, and from the spine round to four inches across the middle line in front, and distinct fluctuation could be felt in the tumor below the ribs. I kept the case under observation from August to February, during which period she increased two and

a half inches in girth over the lower ribs, and fell off markedly in health. The question lay between aspiration and hepaticotomy, and this could be decided only by our being able to recognize which of the two varieties of hydatid disease my patient suffered from. No indication of this could be obtained, and having a growing distrust in aspiration for abdominal surgery, and an increasing confidence in abdominal section, I proceeded similarly as was done in the other cases. It turned out to be a large monocystic hydatid. The thickness of liver tissue through which I passed was nearly an inch, and I had a little trouble with hæmorrhage, which was, however, completely controlled by pressure. I fixed in a wire drainage tube after having united the edges of the two wounds, and replaced it by a soft rubber tube at the end of a fortnight. This latter tube I finally removed April 13th, and on the 19th the wound was almost healed, the patient was getting about, eating well, and rapidly gaining strength. Possibly in this case it might have been better to have tried aspiration first, and that may be the opinion of some. I do not agree with this however, and I see no reason to regret my action. I am growing more and more satisfied that all such cases will be best treated by abdominal section. (P.S.—This patient also is now in perfect health. I have operated upon three other cases of hydatids of the liver, in exactly the same way, and all have done well, September 16, 1881).—Lawson Tait, M.D., *Birm. Med. Rev.*—*N. Y. Med. Abs.*

PRACTICAL OBSERVATIONS ON OVARIOTOMY.

BY DONALD MACLEAN, M.D., ANN ARBOR, MICH.

Having for some years past devoted a good deal of attention to the subject of ovariectomy, I had much pleasure in meeting with Dr. Thomas Keith of Edinburgh last year, and in seeing him operate on several cases, and I have to acknowledge my indebtedness to that distinguished surgeon for numerous valuable suggestions which I have since adopted in my practice and which I am desirous of communicating for the benefit of others. Within a period of nine months I have performed ten ovariectomies and previous to that time I had done sixteen. Of the last ten cases, ten recovered. In the management of these ten cases I have to some extent tested several of Dr. Keith's methods and appliances and am convinced of their great value.

First of all I desire to say that in my opinion the operation in question requires for its successful performance so much surgical experience and dexterity, such carefully arranged surroundings, so

many appliances and such perfect preparations in all respects, that its practice should be confined to a comparatively limited number of surgeons who should be in the truest and best sense of the term *specialists*. Of late years I am sure that the operation has been notoriously abused in this and other states. It would be an easy matter to collate a long list of unpublished cases operated upon under circumstances which rendered success an exceedingly remote possibility, and in which, as a matter of fact, the rate of mortality is almost one hundred per cent. Unless a surgeon is so situated as to give him points of experience, surroundings and equipments, special advantages for performing ovariectomy, justice to all concerned, demands that he should refrain from recklessly attempting to gratify his personal ambition at so great a risk to his patient's life.

The remarkable success of certain celebrated ovariectomists, has been attributed to the cautious manner in which they have selected their cases, declining to operate whenever the difficulties and complications of the case have seemed to endanger the chances of success. My own conviction is, that the care and thoroughness with which they prepare themselves and their patients, in each and every instance, furnish the true explanation of their success, and I am sure that their example has not been followed as universally as it ought to have been. The practical points which I wish to refer to more particularly at present are the following:

(1) The anæsthetic and its mode of administration; (2) Antiseptics; (3) Treatment of the pedicle; (4) Management of adhesions; (5) Drainage of the peritoneal cavity.

(1) *The Anæsthetic*.—In common with Dr. Keith and others I have generally used ether in this operation, but in my latter cases, chloroform. By the use of a very simple apparatus, I believe that chloroform may be used in ovariectomy and in all other operations with as much safety and satisfaction as any other anæsthetic. This apparatus consists of two parts: (1) an inhaler made by stitching a piece of cotton flannel over a wire frame which fits like a small tent over the patient's nose and mouth; (2) a dropper which consists of a two-ounce bottle with a perforated cork and two metal tubes, one of which merely admits air to the bottle, while the other permits the chloroform to escape drop by drop. By this means I believe that the greatest degree of safety is secured as well as the utmost economy of chloroform.

(2) *Antiseptics*.—In the cases of ovariectomy which I saw Dr. Keith perform he used all the Listerian antiseptic appliances. I could see, however, that he was beginning to doubt as to its expediency. He assured me that he had seen patients die with "brutal haste" from carbolic acid poisoning, and I believe that I can say the

same myself. Since then (as is now well known), he has laid carbolic acid aside to a large extent, if not entirely, and prefers to trust to the careful arrest of hemorrhage and the thorough drainage of the peritoneal cavity. My own limited experience hardly justifies me in expressing a decided opinion on this important point, but, unless there are special reasons for doing so, I shall not hereafter resort to the use of the carbolic acid spray, against which several serious objections have been justly urged. My belief is that by exercising due care in arresting hemorrhage, sponging out the peritoneal cavity till it is absolutely dry, and in making provision for the escape of effused fluids, the danger of septicæmia is sufficiently provided against. Blood poisoning has occurred in spite of all antiseptic precautions, and it has been escaped in cases not treated antiseptically, and in which the circumstances seemed highly favorable to its development.

(3) *Management of the Pedicle*.—In my sixteen cases I had transfixed the pedicle with a double ligature and tied it in two halves, cutting the ligatures off short and dropping the pedicle into the pelvis. So far as I know, this method of treating the pedicle proved satisfactory. I have never seen any bad results follow from this source. Nevertheless, Dr. Keith's method has seemed to me to be, although somewhat slower, still on the whole, much more safe and satisfactory. He first of all seizes the pedicle in one or two pairs of strong forceps with a catch in the handle. If the pedicle is narrow, one pair; if broad, two; so that the vessels are safely controlled for the time. He then cuts away the tumor, and applies his clamp to the pedicle on the cardiac side of the forceps, which latter he then removes, leaving at least one and a half inches of the pedicle projecting beyond the clamp. To this projecting part of the pedicle the actual cautery is applied in the form of a solid mass of iron at a black heat, which slowly sears and shrivels up the tissues of the pedicle. This part of the procedure is conducted with the utmost care and deliberation, and is sometimes the longest part of the whole operation. The clamp is formed of two solid metallic bars furnished with a screw by which they are made to compress the pedicle with great tightness. There are also two wooden handles to the clamp by which the surgeon holds it in his left hand while he applies the cautery with his right. During this part of the operation the peritoneal cavity is filled with soft sponges, and the edges of the wound are held in apposition by the hands of an assistant. Between the abdominal wall and the lower surface of the clamp, a pad of wet cloth is placed to ensure its thorough protection from the action of the cautery. The pedicle is gradually shrivelled up and the debris wiped away until all of the pedicle external to the clamp is disposed of. The latter is then unscrewed and removed while the surgeon takes

care to retain control of the remainder of the pedicle until he has carefully examined it and satisfied himself that there is no tendency to bleeding. If there is any doubt on the point, the pedicle should be transfixed and securely tied, either with strong catgut or a silk ligature. All danger of hemorrhage being in one way or the other guarded against, the pedicle is permitted to subside into the pelvic cavity.

(4) *Treatment of Adhesions.*—The only point I wish to note on this part of the subject is the vital importance of securing every point that shows the slightest inclination to bleed. Much patience and perseverance are sometimes required for this part of the operation, but it is impossible to overestimate its urgent necessity. The best ligatures to use, in this situation, are those made of carbolized catgut. They are, of course, cut off close to the knot.

(5) *Drainage of the Peritoneal Cavity.*—The only method of drainage now resorted to is that by means of a glass tube, the lower end of which rests in the Douglas cul de sac, while the other projects through the lower end of the wound in the abdominal wall. The drainage tube may often be dispensed with, and the operator will always be glad to omit it when he feels that he can do so with safety. In cases where there is any prospect of extensive effusion, especially if there is any reason to fear oozing of blood, the drainage tube is *indispensable*. It was first used by the late Professor Peaslee, but at least one fundamental alteration has recently been made in his method of using it. Peaslee kept a plug of carbolized cotton in the mouth of the tube, and he removed this from time to time and allowed the accumulated effusions to escape. Now, the effusions are not permitted to accumulate, the mouth of the tube is always kept free and the effusions are provided for by the application of a large, soft carbolized sponge over the end of the tube. The sponge is enveloped in a sheet of rubber cloth which has a hole in its centre through which the end of the drainage tube projects. The fluids are thus caught in the sponge, and at stated intervals the nurse unfolds the rubber sheeting and replaces the saturated sponge with a clean one. In this way the fluids are got rid of as soon as secreted, and at the same time their quality and constitution afford valuable information to the surgeon. Just as soon as all appearance of effusion has ceased the tube may be removed and the opening closed with a hare-lip suture. This will sometime occur as early as the fourth or fifth day. If the discharge from the tube prevents any sign of becoming purulent, the peritoneal cavity may be washed out with a weak solution of carbolic acid and common salt; a drop or two of the former and five grains of the latter to a pint of water at a temperature of 100° Fahrenheit. This is an expedient which in my

experience never fails to afford material relief and comfort to the patient.—(*Physician and Surgeon*).

RARE COMPLICATIONS AND SEQUELÆ OF TYPHOID FEVER.

The Boston Med. Journal of Dec. 15th, contains the following interesting clinic by Dr. Da Costa, of Philadelphia.

I will to-day group together for you a series of cases of typhoid fever, which show a few rare complications and sequelæ. Perhaps some of the peculiarities of this affection may be best illustrated by the following specimens taken from a case that perished during the height of the disease:—

CLINICAL HISTORY AND MORBID ANATOMY OF TYPHOID; EXAMINATION OF THE HEART.

These specimens were taken from the body of a man who died in the wards a few days since of typhoid fever. His case was looked upon as hopeless from the beginning, for reasons which the autopsy has fully demonstrated to have been correct. His name was James Y., born in England, thirty-nine years of age; he was admitted into the hospital on the fourth of this month with diarrhœa. The record states that he had then been ill for nearly a month. He was a machinist, and had only been in this country a few months. At the beginning of his illness, it is said, that there had been no chill, the onset of the fever was gradual, but diarrhœa was a prominent symptom; he also had bilious vomiting, frequent epistaxis, and severe headache. Upon admission he had a dry cough, fever, and diarrhœa, his stools were thin, yellow, and frequent, so frequent that he had ten during the first day. From the first he had been troubled with a symptom which always makes one solicitous about a case,—he could not sleep; his temperature was 104.6° F.; the pulse was, however, only beating 80 in the minute; it was compressible and very weak. Upon examining his chest, we found slight dullness existing beneath the angle of each scapula. There was a good deal of hypostatic congestion in both lungs posteriorly, with coarse rales very generally distributed. But what struck us most forcibly, and what indeed made us think the case one of the greatest gravity, and most likely to prove fatal, was the state of the heart, the sounds were muffled, the first was only with difficulty detected; every now and then, about every second or third beat, there was a most marked intermission.

In consequence of his general condition and weak heart he was at once placed on stimulants, at first wine, subsequently whiskey, gradually increased to twelve ounces in twenty-four hours, with four ounces of sherry wine. He was also

steadily given strychnia, one sixtieth of a grain three times a day, in view of the fact that the great danger was going to be a failure in the action of the heart. This proved to be true; for while he remained weak, and was suffering with restlessness, delirium and tremor, the gravity of the symptoms was not so much due to the effect upon the nervous system of the typhoid fever poison, nor to the state of the bowels,—for the diarrhoea was readily kept in check with mineral acids and a little opium, in the form of suppositories,—as to the weak and irregular action of the heart, which indicated grave disorder of the walls of the heart. Towards the end it became somewhat more regular, but it remained weak. I ought to state, also, that about five days before death there was a slight but not excessive epistaxis. The temperature all the time remained high, and on the day before death was 105° F. I will now invite your attention to the specimens.

Let us first confirm the diagnosis of typhoid fever by examining the intestines. Here is the cæcum, here the ileo-cæcal valve. Besides the great ulceration of Peyer's patches, these solitary follicles are in the same condition. Passing up the bowel, we find patches infiltrated, and with only superficial erosion, a condition not incompatible with recovery; others more affected are ready to slough away. The kidneys are large, somewhat fatty. There had been no albumen in the urine during life, and this fatty condition must be looked upon as due to a cause antecedent to the occurrence of the fever; it is not the form of renal degeneration which is often found in typhoid. Look at the spleen. As the intestinal ulcers were characteristic, so this spleen is characteristic. It is very large and full of blood, weighing twenty-five ounces; it constitutes a lesion almost as essential as that we have just seen in the bowel. This is the large dark spleen of typhoid fever, the currant-jelly spleen. The lungs show very marked evidence of hypostatic congestion at the posterior-inferior portions, but there is no true pneumonia; the tissues crepitate, it is not infiltrated to the extent of consolidation, but simply engorged with blood, the congestion we recognized during life. The liver also very large, weighs sixty-four ounces, at least fourteen ounces more than normal, it is dark-colored and exudes dark blood on section. The heart is fatty, the walls distinctly so. The leaflets of the tricuspid valve are healthy; those of the mitral valve are slightly thickened, especially at their free border, but were not sufficiently affected to permit mitral regurgitation during life. Now why did this man die? I believe it was from the fatty heart. Of course it was a hard case in itself, the temperature indicated that; it was, you recall the record, 104° F. to 105° F. The marked nervous symptoms also, which he presented,—the tremors, depression, and sinking down in bed, always

indicate gravity; but with the condition of the heart these made the prognosis especially bad. There can be no reasonable doubt about one feature in the history, although the man was unable to give a full account of himself, yet the fact I refer to is confirmed by these appearances, the man had been very intemperate. The liver and kidneys show the intemperate habits of the individual. The same cause may have had much to do with the weakness of the heart, and the degenerative condition of its walls.

REMARKS ON SLOW PULSE IN TYPHOID.

Before passing to the next case I will make some remarks upon one of the prominent clinical features of the disease, which the case will bring to your mind—the slow pulse. I have said that the pulse was only eighty when he was admitted, although the temperature was 104.6° F. I have also told you that it was intermittent. Now, gentlemen, look at the disproportion between the pulse and temperature, 80 and 104° F. Is this a good or bad sign? It is a bad sign. A slow pulse is not of itself of grave import in typhoid fever, for the case may be a very light one; but when the thermometer indicates a high temperature, then a slow pulse indicates danger. This is so true that when I find the disproportion existing between the pulse and temperature I know that I have so grave a case that in the vast majority of instances the patient will die. You may ask again, What is this slow pulse owing to? and why the irregular pulse? I attribute them in part to a peculiar influence of the typhoid fever poison; but largely to this,—it was acting upon a weak and fatty heart. It is a curious fact in fatty heart that in acute diseases, instead of becoming more frequent in its action, it becomes often slower. This is not an isolated case in my experience. I have known it to occur in pericarditis and other acute maladies. Therefore, a slow pulse in this case had to do with a condition of the heart which in itself is a cause of great danger.

But I should be giving you a wrong impression, if you have been led to infer, that in every case of slow heart, in typhoid fever, be it regular or irregular, this is the effect of a degeneration of that organ. That would be incorrect. I recall a case which I saw a few weeks ago, in a young man, too young to have fatty heart, where there was no question of intemperance, for he was perfectly free from bad habits; his pulse was 80, his temperature from 104° F. to 105° F., but the heart was not irregular as it was here. The slow pulse in the case I refer to was, therefore, not due to a fatty heart nor to any fault of the ventricular walls or valves, but to some peculiarity in the poison which prevented the heart from rising coincidentally with the temperature. The case, after a long and desperate illness, proved fatal. Whatever be the ex-

planation, a slow pulse and a high temperature are among the most dangerous combination of symptoms of typhoid fever.

You will also be interested to learn—and I will now only call your attention to the fact, intending to return to it—that this man had epistaxis again only a few days before his death. Another case will furnish me with a better illustration to speak of this symptom.

A CASE WITH RECURRING EPISTAXIS AND PAROTID SWELLING.

I shall now show you a case of typhoid fever with most unusual complications, and one in which I have instituted a treatment, which has been followed by considerable success. This man has been in the hospital for seventeen days. His name is Emil B., twenty-seven years of age, a cooper; he is a German. He came into the wards a very ill man, having been sick for four weeks before admission with diarrhoea and weakness. He had headache, with a furred tongue, and vomiting, and yellow conjunctivæ, indeed, there had been what is roughly and loosely sometimes called "a bilious complication" in the case, but this was all over before we saw him. He also had epistaxis, which from his history had been very free and frequently repeated; in truth it was stated that he bled at the nose every morning for a while.

Upon admission the man was found to have typhoid fever, he was very pale, weak, and feverish, the thermometer indicating 104° F., his pulse was 120 in the minute. He had frequent but not exhausting diarrhoea. He was so weak that we placed him promptly upon stimulants and quinine; and for the restlessness which he exhibited, he was ordered an ice-cap, to be kept upon his head. The looseness of the bowels was quite marked, but what is of more importance, he lost control of his sphincters, and the copious frequent discharges were passed involuntarily so that it was difficult to ascertain the number of passages. Not to detail the features of this grave case besides the frequent pulse, high temperature, and diarrhoea, I will say, in brief, that the looseness of the bowels was kept in check with opium, the restlessness was also relieved by this agent aided by the ice; and with steady nourishment, and twelve ounces of whiskey daily, the man rallied, and what seemed a very bad case soon showed great improvement. How bad a case it was you may judge from the temperature chart. Here it is; 105° F. the first night, 105° F. the next, then 103° F., and after that gradually declining to 101.5° F.; then, suddenly, up shoots the temperature again and becomes 104° F., and this rise of which I am speaking, is found to be coincident with just the complication for which I wish to show you the case this morning. Look at it, or at least look at what remains to-day, for enough remains to identify it. See this dense par-

otid gland forming a considerable tumor on the left side at the angle of the jaw. This is a parotid swelling or a parotitis occurring as a complication of typhoid fever, and limited to one, for on the right side there has never been any such affection.

TREATMENT OF SWOLLEN PAROTID IN TYPHOID FEVER.

Now, gentlemen, this man, who was doing very well, when this swelling appeared seemed very ill, and the whole aspect of the case became more threatening; for this occurrence is one of considerable gravity. I will not dwell upon its pathology at present, but at once call your attention to the treatment instituted, a treatment which I have, in at least one case in this hospital, previously known to produce a remarkable result. It is the steady application of ice to the swollen gland. Mark you, the usual termination of this glandular inflammation in low fevers is profuse suppuration, long continued discharge of unhealthy pus, and a pyæmic condition; the state of the patient becoming more and more grave until he perishes from blood-poisoning or exhaustion. I have tried before now all methods of treatment, painting with iodine, the application of blisters, hot poultices, only to give them up as valueless. It then occurred to me that the steady local application of ice at the beginning might prevent this suppuration and the consequent exhaustion. We resorted to it as in the previous case, and the result was admirable. The swelling became less within twenty-four hours; the tenderness also was not so marked, the general condition much better. This was continued for several days with steady improvement. Yesterday, the resident physician, perhaps too soon, believing that the swelling was reduced and the inflammation over, suspended the ice treatment. Moreover, you observe that the temperature had gone down before that time from the effect of the ice, which acted as a general sedative. There was good reason then for interrupting the treatment, but what was the result? He has more swelling this morning. But we have not lost the good accomplished by the ice, merely the benefit of its continued use. There is no suppuration, the gland is hard, and tender, the surface red. I will resume the treatment, and unless I am very much mistaken, I shall be able to show you the case at our next meeting entirely free from this complication.

His pulse is now good, not over 100; his general condition decidedly improved; the bowels are under control, but still require looking after; he is having three or four stools a day, when too frequent he is given an opium suppository from time to time; he has more strength than before; his tongue is cleaner; the mental condition has been improving. Therefore the group of symptoms which were at first so marked are now in abeyance. Notwithstanding that this glandular swelling is

looked upon as a bad complication, I am disposed to continue his treatment for a few days longer; then if the condition is favorable, I will abandon it, and apply iodine. He now is taking tincture of iron, twenty drops four times daily, and eight grains of quinine, twelve ounces of whiskey (half ounce every two hours in milk) through the day, keeping the bowels in check with a little opium by the mouth or in a suppository, given as may be necessary. The man made an excellent recovery. Towards the end a slight amount of purulent discharge was evacuated from above the angle of the jaw, where the ice had not been well applied.

The complication I have shown you here is one of the very rare ones in typhoid fever. I have seen it very often in what is called typho-malarial fever,—that is to say for the most part typhoid fever with malarial complications.

PATHOLOGY OF TYPHOID PAROTITIS.

I am speaking from a large experience with the disease when I say that it is also not uncommon in typhus, but in typhoid it belongs to the rarest of its complications. I have told you already that its tendency is to supuration, which makes the condition of the patient much graver. But, gentlemen, unless the size of the swollen gland is reduced by resolution, it is better for it to suppurate than to remain enormously enlarged. I remember a case of typhus fever where it was necessary to resort to tracheotomy to prevent suffocation from the mechanical pressure exerted by the mass upon the trachea. If it be found impossible to prevent supuration with ice, then the next best thing would be, I say, to encourage free discharge to prevent burrowing and pressure upon the air-passages. I have spoken of its rarity, now what is the cause of this complication? It is an expression of blood-poisoning. It belongs to certain low forms of fever in which the blood becomes profoundly altered, and the wonder is that it is not more frequent in typhoid fever than it is. It results, moreover, not only from a septicæmic condition, but also in the pyæmic state, which is more often seen in surgical than medical cases. In the latter condition it always indicates great gravity. I have not conversed with surgeons upon this ice treatment of gland swellings in pyæmia to prevent supuration, but will suggest it, as it may prevent an additional drain upon the system. I believe it deserving of further trial.

SOME UNUSUAL SEQUELÆ OF TYPHOID.

We are dealing this morning with bad cases and rare complications. I now show you another typhoid fever patient, who has been very ill, and could not be brought into your presence before; he is now improving so that I can show him without any risk to himself. I will, however, proceed at once to examine him so as not to detain him in the clinic-room; I will then make some remarks upon the case.

His name is Martin M., twenty-one years of age, of Irish extraction. You see he is very pale, frightfully anæmic; his mind is now perfectly clear; he passes out his tongue when told; it is not very much coated, you are, perhaps, struck more with his pallor than with anything else; his pulse is feeble, and beats 110 in the minute, it has always been about 120; his bowels are now regularly moved once a day, or sometimes only every second day; he has no tenderness in the iliac fossa nor indeed anywhere in the abdomen.

MILK LEG IN TYPHOID.

But now comes one of the symptoms which made this so serious a case, and of which you will see sufficient evidence remaining to identify the clinical history. He has had milk leg of very bad character, a phlegmasia alba dolens. Look at it. Although the leg is markedly diminished from what it was, you will still see that the right leg is considerably more swollen than the left. It has been still more swollen and very tender on pressure; the pain on pressure now has also subsided, except immediately along the course of the saphena vein, which is large and of cord-like density.

PURPURA DURING TYPHOID.

This swollen leg has been one of the symptoms from which this poor man has been suffering, now happily declining; it was associated for a time with considerable pain in the thigh and in the calf of the leg, but he has also had something else. Look at this left leg. Just above the ankle and on the dorsum of the foot see the large petechial spots, dark blotches, now only seen in this situation, but about a week ago they were all over the body, large purple and black spots in the skin, which have now almost all disappeared.

There is another point to which I will call your attention, and then will let him go out. In addition this man's life was almost ebbing away by profuse and repeated bleedings from the nose, so much so that the only means we could employ to stop them was plugging the nose, which finally arrested the hæmorrhage, which not only gushed from his nose but passed into the pharynx, and was swallowed, and afterwards vomited. This is a case of recurring epistaxis late in the disease. It was subsequent to these attacks of bleeding that these spots appeared all over the body, although a few had been observed before.

These are principal features of the case. I will now only make an examination of his heart. I tell you that there is no valvular disease; the first sound is still feeble and laboring, the second is clear; a systolic blood murmur is heard at the right base as well as at the left, but more at the right. There is also a certain amount of bronchitis, for a number of mucous rales are heard in the lungs. This completes our examination of this unpromising case, and he can be removed to the ward.

TEMPERATURE RECORD DURING OCCURRENCE OF SEQUELÆ.

Let us now study his temperature record. His temperature this morning is normal. I will now show you some of the most interesting temperature sheets [Each sheet contains the record for four weeks. REP.] it is possible to see. Look at this last one, see the enormous variations during the last two weeks, now down to 98° F. then shooting up to 105° F. This is not the course of typhoid fever temperature. Look at it; it begins at the end of the second temperature sheet, and here it is at its maximum. Now, the interesting part to us is that these temperature variations were accompanied by chills which were not influenced by quinine, and these temperature rises corresponded with attacks of epistaxis; during the last two instances this was noticed certainly.

This is not the temperature record of typhoid fever, certainly not the typhoid record of a man ill with typhoid, who has been in the hospital for eight weeks, and who has been sick at least nine weeks. It is, therefore, the record of these strange complications from which the unfortunate has been suffering. Milk leg, epistaxis, profound alterations in the blood, petechiæ, and chills, the latter uninfluenced by quinine. What does it mean? It means that this man has been pyæmic. There has been septicæmia, milk leg, finally a pyæmic condition of the blood induced by the phlebitis, as shown by these irregular chills.

REMARKS ON EPISTAXIS.

This altered condition of the blood, which gave rise to this anæmia, was also the cause of the recurring epistaxis. Now, late epistaxis in typhoid fever as compared with early epistaxis is relatively very rare; it almost never occurs, although you have seen in this clinic to-day two marked cases which apparently prove the contrary. In the other case the epistaxis occurred within two or three days before death, but in this man it came on in the seventh or eighth week, when his life was threatened by the petechiæ (purpura hæmorrhagica). Gentlemen, epistaxis, as the rule, is an early symptom of typhoid fever, occurring prior to the decided development of the fever, or in the first week. Here you have had an illustration of how it may happen as a late complication, but when late it is a most dangerous one.

The treatment for the epistaxis, ergot, iron, locally and internally, was unsuccessful, until we finally resorted to the plugging of the nostril.

BLOOD CHANGES IN LOW FEVERS.

Finally, before dismissing this much-complicated case, I must say a word about the petechiæ. Do petechiæ belong to the clinical history of typhoid fever? Gentlemen, you may pass through a lifetime without being able to duplicate this case. These extravasations you will see in typhus or in

cerebro-spinal fever, but they are most rare in typhoid. They bespeak a condition of blood that is serious in its results, a state of dissolution to an extreme degree, occurring very late in the disease. I have seen this also in typho-malarial fever—which is still typhoid—as it occurred in the army in soldiers who had acquired the so-called Chickahominy fever; among those who were thus brought to Philadelphia I remember a number had petechiæ.

PROGNOSIS OF CASE.

These are some of the leading clinical features, complications, and sequelæ of typhoid fever under rare conditions. This man has passed through a severe ordeal, but I believe that he will rally, and if we can get his blood in better condition I think we may now look for recovery. His temperature is once more normal, the milk leg is passing away, the chills no longer occur, nor the attendant phenomena that bespeak a condition of pyæmia from which he was once laboring.

His treatment now is fifteen drops of the tincture of the chloride of iron, with five of muriatic acid, which, formerly taken thrice daily, we will increase to four times a day. He also gets five grains of quinine each morning.

His chances are now fairly good; a week ago you would not have thought he had a chance. There were no difficulties of diagnosis here; the early symptoms of typhoid fever were marked, very marked; it was always a bad case. We found before the peculiar sequelæ appeared, that there had been also a strong history of syphilis, although there were not any strong syphilitic manifestations. I mention this because it belongs to the clinical history, not because it had any especial influence upon the course of the disease.

CARDIAC HYPERTROPHY AND RENAL DISEASE.

The problem of the subordination of cardiac hypertrophy to renal disease, when the two co-exist, to which so much discussion has been lately devoted, has engaged the attention of M. Straus of Paris, who has published in the *Gazette Médicale* a preliminary account of his experimental results. The difficulties of the problem of the relation of the heart to the kidney lesion depend upon the complexity of the morbid conditions present in the system. These are much simplified in an experimental inquiry, although the results thus obtained have not always been very decisive. It is difficult to preserve for long the life of animals after a lesion of both kidneys, and Straus has therefore contented himself with causing atrophy of one kidney by ligature of the ureter. Previous experiments of the same kind have yielded contra-

dictory results. Simon, Rosenstein, and Gadden observed no cardiac consequence; Beckmann, Grawitz and Israel, and Lewinsky found a resulting hypertrophy of the left ventricle. The experiments of Straus were made on twenty guinea-pigs, which were killed from four to six months after the operation. A pure hypertrophy of the left ventricle was found to be the invariable result. The average weight of the heart, for instance, in three cases was 2.76 grammes, while that of three healthy animals was only 2.25 grammes, and this although the average weight of the guinea-pigs operated upon was two hundred grammes less than that of those selected for comparison. The hypertrophy was uncomplicated by any degeneration of the muscular substance of the heart, and was apparently the direct result of the atrophy of the kidney, since the arterioles in various parts were examined and found to be healthy. Grawitz and Israel asserted that although cardiac hypertrophy might follow a renal lesion in old animals in which the other kidney did not sufficiently overgrow to compensate for the loss, this result was not to be obtained in young animals. This statement is disposed of by the experiments of Straus, since nearly all the guinea-pigs he experimented upon were young. Moreover, he was unable to observe any inverse relation between the degree of hypertrophy in the heart and kidney, such as should obtain if the conclusions of Grawitz and Israel were correct. In one of the cases in which the increase in weight of the heart was greatest, the remaining kidney had increased to at least double the normal weight. An objection which is often urged against the dependence of cardiac hypertrophy on renal disease is the absence of such hypertrophy in cases in which the kidney suffers in consequence of an affection of the urinary passages. But Straus relates, to show that hypertrophy may be found in these forms, two cases of women dying from uterine cancer which had compressed the ureters, and had caused dilatation of the pelvis of the kidneys and very marked renal lesions. In each there was considerable hypertrophy of the heart without any valvular lesion. In a discussion on this paper at the Société de Biologie an interesting and apposite case was related by Quinquand. A man twenty-eight years of age was shot in the left lumbar region, and recovered after an illness attended with hæmaturia. At this time there was no hypertrophy of the heart, but distinct evidence of this was discovered two years afterwards. He died with symptoms of uræmia four years later. The left kidney contained an old abscess, the right was hypertrophied, and the heart was increased in weight to eighteen ounces in consequence of hypertrophy of the left ventricle. All the liquids of the body were found to contain a large excess of urea.—*The Lancet*.

REMOVAL OF THE UTERUS FOR CANCER.—The

November number of the *New York Medical Journal and Obstetrical Review* contains a "special article" by Dr. Andrew F. Currier, of New York, in which the various methods of removing the entire uterus for cancer, as practiced by Freund, Schröder, Czerny, and others, are reviewed, as well as the general question of the advisability of removing the organ. He thinks the advantages of the vaginal method over that of Freund (by laparotomy) are enormous—there is but one section of the peritoneum, the intestines are unharmed, there is a better opportunity to discover diseased tissue, which is most likely to be situated in the vicinity of the cervix, and, most important of all, the patients often survive, which is rare by Freund's method. But most patients are not likely to be benefited by either of these serious operations; the most hopeful cases will be those in which the patients are warned of their danger in the early stages of the disease, and in such cases Schröder's supra-vaginal excision of the entire cervix is most likely to prove of service. This operation, while not so radical as removal of the entire organ, and hence not so efficient in cases involving the tissues above the internal os, is far less grave, and is, besides, more thorough than amputation of the cervix as it has ordinarily been done in the past. In those rare cases, however, in which the body of the uterus alone is involved, there is no alternative to laparotomy, either by Freund's operation or by some modification of it. As to drainage—a most important item in such cases—a perfect system seems impossible, but Bardenheuer's, although in the hands of others it has not fulfilled its author's expectations, affords as good results as any yet devised. As to the broad question of whether cancer of the uterus, and so cancer in general, can be radically cured, the author thinks the logic of events points to its approaching solution.

OBSTETRICAL EXPERIENCES.—Dr. David M. Williams, of Liverpool, in an abstract of 2,500 confinements, "chiefly among the comfortable middle classes," states that he considers the forceps a great boon, always to be used with comfort and safety, without injury to the mother, and in only one case did he find craniotomy necessary. For over twenty years he has introduced the forceps into the uterus, often saving the child by that means, when the os was very narrow, but dilatable. He had only employed chloroform in the first stage to overcome rigidity; in the second stage he often administered it till complete unconsciousness was produced, believing that the perinæum may thus be frequently saved from rupture, an accident which will sometimes occur after every precaution. He has cured a complete rent, involving the spineter, without operation, by rest, local cleanliness, and the induction of temporary constipation by opium. He trusts in ergot especially as a pre-

ventive of flooding in cases where the pains are weak and the intervals long. He denies, on the evidence of distinguished travellers contrasted with the records of contemporary British practitioners, that puerperal mortality is the result of civilization. The truth is quite the other way, and by acting on increased knowledge, more lives will yet be saved.—*British Medical Journal*.

FUNGOID ORIGIN OF DIPHTHERIA.—Dr. Michael Taylor, of Penrith, in recording an isolated outbreak of diphtheria, expresses his belief in the influence of dampness as an exciting cause, and in the connection with that disease of certain fungi associated with dampness. Three children, living in the same house and occupying the same bedroom, were all seized with diphtheria last August, in a district then free from any epidemic. The house was very healthy until the water-spouting of its roof got out of order. A great rainfall in July caused one wall of the bed-room to become saturated, through leakage of the spouting, the paper on the wall facing a passage, between the apartment and a second bed-room, became sodden and separated from the plaster, and small clusters of a toad-stool (*Coprinus*) grew on the wall, as well as a fine thready bluish mould. The drainage of the house and its drinking-water supply were very good. Excepting near the damaged spouts, the house was dry; and it is remarkable that the three children slept several weeks in their warm cribs in the damp room without suffering in any way, and it was not until the fungi appeared that they were attacked with true diphtheria. This is in accordance with Professor Laycock's theory, that diphtheria depends on *Oidium*, or potato-fungus, for although in Dr. Taylor's case another vegetation was in question, there is fair reason to believe that the sporules of many kinds of fungus may not merely irritate, but directly infect the mucous membrane of the throat.—*British Medical Journal*.

NERVE STRETCHING FOR LOCOMOTOR ATAXY.—Dr. Charlton Bastian has recently delivered a clinical lecture, at University College, on a marked case of locomotor ataxy, the symptoms of which he described very minutely. The patient was about forty years old, there was wasting of the muscles of the extremities, especially in the left leg and thigh; at length the movements of his legs became slow and jerky, after walking a few yards he would become exhausted and his legs would double up under him. Mr. Marshall cut down on the great sciatic nerve on the middle third of the right thigh and stretched it with his finger, pulling it twice upwards from below, thence twice downwards from above; antiseptic precautions were employed. About five weeks later, the right lower limb having markedly improved, whilst the left remained as it was before the right sciatic

nerve had been stretched, Mr. Marshall operated on the left sciatic in the same manner. Troublesome diarrhoea followed, but seven weeks later when the patient tried to walk, his gait was found to be much better, and tactile sensibility, previously impaired in the lower extremities, had become perfect. The first operation was followed, in seven days, by the disappearance of a constant aching pain in the hypogastrium, which did not return, though slight pain was felt in the lower part of the chest. In a less advanced case treated in the same manner the improvement was but slight. The wounds in these cases were slow to heal. Dr. Bastian does not attempt to explain the mode in which nerve-stretching acts, but if it is found to do good, it should be practised. The manner by which many drugs act specifically on many morbid processes is quite unknown, yet that is no reason for not continuing their use when they are known to be beneficial in disease, and the same principle now applies to nerve-stretching.—*British Medical Journal*.

PROLAPSE OF THE BLADDER, AND RUPTURE OF THE PERINEUM.—Lena P., twenty-six years old, and a native of Germany. She has been married eight years, and has had three children, but no miscarriages. The last child was born six months ago.

How long have you been sick, Mrs. P.? "Six months." Have you never been well since the birth of your last child? "Yes, I feel well sometimes, but I cannot do my work any longer." Why cannot you do your work? "Ever since my baby was born my womb keeps coming down outside of my body, and prevents me from working as I used to."

Here, you see, we have a diagnosis given us at once, but, as is very apt to be the case under such circumstances, it is not correct. The uterus, I find, has never been down at all.

What else troubles you? "Pain in the back and great distress in the lower part of my stomach." Do you suffer from anything else? "I feel just like fainting sometimes, because I am so very weak." Have you any trouble with your bladder? "No, but I notice that when I pass my water the womb always goes up, though it comes down again afterwards." Do you have to get up at night to pass your water? "No."

From the appearance presented when I first looked at the vulva of this patient, I supposed that the uterus was in reality out of the body, as she stated; but as soon as I touched the supposed uterus with my finger, I found that the mass yielded, and that instead of having prolapsus uteri to deal with, there was prolapsus of the anterior wall of the vagina with prolapsus of the bladder as well. In addition, the examination revealed that the patient had also lost her perineum; and hence

it is that the bladder, having been deprived of its normal support, has fallen down in this way, until it is practically entirely out of the body.

But what gives all this pain in the back and the great distress of which the patient speaks? In pursuing my investigation of the case I found, furthermore, that the uterus was completely retroflexed; the cervix being felt very high up, and the fundus down behind it. I thought at first that the latter might be a fibroid (but soon found that it was not sufficiently hard for that), and then that it was a small ovarian cyst which had slipped down into Douglas's cul-de-sac. When I resorted to conjoined manipulation, however, I at once found that the body of the uterus was not in its normal position, and the passage of the sound showed that there was complete retroflexion of the organ. If the diagnosis of prolapsus uteri had been taken for granted here, and a pessary appropriate for that condition ordered, it would have done harm instead of benefiting the patient. A pessary for prolapsus can do no good where there is retroflexion of the uterus, and this is altogether the most marked case of retroflexion that has been at the clinic for at least a year.

The question now comes up, Has all this trouble come on since the birth of her last child, six months ago? I think not; for it is much more probable that the prolapsus of the bladder was the result of her first labor, six years ago. The retroflexion, however, I believe must have followed the last one, six months ago; because it is so extremely marked that I can scarcely see how it is possible that so many conceptions should have occurred with the organ in this position.

This patient, I believe, can be cured; but it will be a very troublesome case to treat. What shall we do first here?—restore the perineal body? If we do, we shall most certainly fail in curing the patient; because this bladder, instead of being of the normal size, is now three times as large as it ought to be, and it cannot be satisfactorily supported in its present condition. The only proper way to proceed here is to begin by reducing the size of this organ, and this can be done most simply by taking an ellipse from its walls, and bringing the denuded mucous membrane together by means of silver wire sutures. After the operation Sim's glass plug should be worn for a time in the vagina, and at the end of nine days the sutures should be removed. Thus having succeeded in markedly diminishing the size of the hypertrophied bladder, the next step will be to restore the perineal body by the usual operation; and the uterus, having then been replaced, should be kept in position by a pessary. When all this has been done for her the patient will imagine that she is cured; but in every such case you should beware of telling the woman that she can get along without wearing a pessary. I should think it would be folly two or

three years before the pessary could be safely abandoned in the present instance, because the uterus has completely lost its tone.—Dr. Thomas—*Boston Medical Journal*.

THE CURE OF VARICOCELE BY SUBCUTANEOUS LIGATURE.—Dr. John Duncan, of Edinburgh, employs carbolized catgut for the radical cure of varicocele. The veins are separated from the artery and vas deferens, and a needle armed with catgut is thrust through at the point of separation; it is then reintroduced at the orifice of emergence, made to pass between the veins and the skin, and brought out at the original entrance; the two ends are then firmly knotted together and cut short; by traction on the scrotum the knot is made to disappear entirely, and the punctures are covered with salicylic wool saturated with collodion. The same manœuvre is repeated an inch higher, and sometimes a third ligature is advisable. A hard lump of coagulum forms between the ligatures, tender at first, but soon diminishing in size and becoming insensitive. Dr. Duncan treats varicose veins of the leg in the same manner, the introduction of the point of the needle into the aperture of exit of the first puncture, and the tightening of the loop of catgut is difficult when there is brawny œdema; in such cases the patient should be kept at rest, and an India-rubber bandage applied for a few days. A single ligature is not sufficient, and to close the lumen permanently, two must be applied about one inch apart. It is essential that no branch be given off in the segment of vein between the ligatures.—*British Medical Journal*.

POTASSIUM BROMIDE IN ORCHITIS AND INFLAMED BREASTS.—Dr. J. Grammer, M.D., says that, when consulted in time, he finds nothing else necessary, either in orchitis or milk breast, but potassium bromide, in five-grain doses, three times a day, or smaller doses, more frequently repeated. In advanced or complicated cases, of course auxiliary measures should be used, if only as a precaution, or to expedite the cure; but he has never had the bromide to fail him even when used alone. In orchitis, a suspensory should always be worn.

In some of these cases, he has seen the disease held in abeyance for weeks, when the patients, would persist in the grossest imprudence, in walking and horseback-riding. He rarely restricts them in diet. Yet even these cases eventually recovered, without suppuration or atrophy,—neither of which results has he seen since he has used this remedy.

He has had no opportunity to test it in the metastatic orchitis of mumps, but is sure it will prove as useful as in the ordinary cases; and though it is a specific inflammation, he expects to find it efficient in the next epidemic of parotiditis he may meet with.

Dr. Grammer has seen but one case of mammary abscess since he commenced the use of the bromide of potassium for such cases, and that case occurred not very long ago. The abscess had already pointed when he first saw it. He opened it, and prescribed potassium bromide, gr. ij, every three hours during the day; and in less than a week her husband reported the patient well. This, however, was not a fair test of the effect of the bromide on a mammary abscess, for there was no infant to complicate or irritate the inflammation. It was to Dr. Grammer a unique instance of the secretion of milk during pregnancy. The woman was four or five months advanced with her fourth child, and she stated that, being habitually rather irregular, she always recognized her pregnancy by the appearance of milk,—the secretion of which thenceforth continued.—*Virginia Medical Monthly*.

A NEW DISINFECTANT.—A cheap and useful disinfectant is a solution of chloride of lead. It is inodorous, effective, and its cost very small. It may be prepared as follows: Take half a drachm of nitrate of lead and dissolve in a pint or more of boiling water. Dissolve two drachms of common salt in a pail or bucket of water, pour the two solutions together, and allow the sediment to subside. The clear supernatant fluid will be a saturated solution of chloride of lead. A cloth dipped in a solution of chloride of lead and hung up in a room will sweeten a fetid atmosphere instantaneously, or the solution thrown down a sink, water-closet, or drain, or over a heap of refuse, will produce a like effect.—*Progress of Science*.

PYÆMIA AND SEPTICÆMIA.—Dr. Ambrose L. Ranney, in a lecture before the Anatomical and Surgical Society of Brooklyn, N. Y., gives his views as to the essential points of difference between pyæmia and septicæmia. Septicæmia he regards as a condition dependent upon a blood poison induced by the contact of decomposing animal matter with living tissues, and then carried by the lymphatics into the general circulation, and is never attended with so-called 'metastatic abscesses or infarctions.' The blood in septicæmia loses its coagulability, and rapidly decomposes when drawn from the body. A suitable soil for its development is any sloughing wound, especially connected with tissues well supplied with lymphatics.

Pyæmia he recognizes as a blood poison brought about by the contact of a miasm with pus, and then absorbed by the blood-vessels, or, it may be the result of suppurative plebitis, either in an open wound or concealed traumatism. In either of these conditions there are always "metastatic abscesses," and the blood of pyæmic subjects has the power of "spontaneous coagulation" in the smaller blood-vessels, thereby showing its current, and causing an embolic infarction, which may be

followed by a so-called metastatic abscess. In reference to the symptoms of these diseases, the onset is nearly similar, both are ushered in by a chill, while septicæmia generally has but the one chill, pyæmia has a succession of them. The temperature of septicæmia is higher than that of pyæmia, and of shorter duration, and nature attempts an elimination of the poison by a profuse watery diarrhœa.

The author's treatment does not vary much from that of others at the present time, namely, disinfection, drainage tubes, when necessary, and thorough ventilation, together with supportive treatment. He prefers "Platt's chlorides" in solution, one to six, or one to forty of water, rather than the disagreeable odor of the carbolic solution. He impressed his hearers with the importance of the general condition of the patient before an operation, a fact too often neglected.—*Annals of Anatomy and Surgery*.

FRACTURE OF THE PATELLA, TREATMENT BY THE WEIGHT AND PULLEY. (N. Y. MED. RECORD.)—At the Presbyterian Hospital, there are two cases of fracture of the patella under the care of Dr. Geo. F. Shrady, which are being treated by the weight and pulley. Both fractures are transverse, were occasioned, as usual, by muscular violence, and the fragments were separated three-fourths and one and one-fourth inch respectively. The limbs are elevated on a single inclined plane, and two strong, broad bands of adhesive plaster are applied diagonally to the anterior portion of the thigh, crossing each other just above the patella, and embracing a pad at the upper margin of the upper fragment. These bands terminate in loops on each side of the leg, and are attached to stout cords which pass to a foot-piece and over a pulley to the weights. The lower fragment is merely fixed by a bandage passed around the splint. Extension is made over the entire region of the quadriceps muscle, while the pad applies itself over the upper edge of the upper fragment, bringing it in apposition to the lower fragment. By these means the fragments are maintained in perfect apposition, without discomfort to the patient. Dr. Shrady prefers this method of treatment to any other he has employed.

AWKWARD MEDICAL POLITENESS.—A physician was called to visit a lady living at a considerable distance from him. After continuing his calls for some time, she expressed fear that it would be inconvenient for him to come so far on her account. "Oh, madam," replied the Doctor, innocently, "I have another patient in the neighborhood, and I can thus kill two birds with one stone."—*Chicago Medical Review*.

TREATMENT OF HÆMORRHOIDS.—Dr. Todd (*St.*

Louis Medical Courier, September, 1881,) says in regard to the treatment of hæmorrhoids that the first step is the administration of a saline cathartic: the best is sulphate of magnesium. After this the following pill may be used:

R. Ext. colocynth. co., gr. xxx;
Ext. nucis vomicæ, gr. xx;
Ext. belladonnæ, gr. x.

Div. in pil. no. xl. One to be taken every evening on going to bed. More or less may be given, according to the effect produced, the object being to secure one full, soft evacuation daily,—neither more nor less. Relief from pain may be gained by the following:

R. Iodoformi, ʒj;
Bals. Peruv., ʒij;
Ol. theobromæ et ceræ albæ, aa ʒiiss;
Magnesia calcinat, ʒj. M. bene.

Fiat in suppositoriæ no. xij. Insert one after each evacuation of the bowels, or, if necessary oftener. Iodoform is a local anæsthetic of great power, and does not constipate.

Hæmorrhoids of long standing will only be benefited by this treatment, not cured. Dr. Todd's plan of radical treatment is as follows. All tumors found at the verge of the anus, and covered in part or wholly with integument, are clipped off with the scissors. If situated within the external sphincter,—the bowels having been moved with a dose of sulphate of magnesia given a few hours before,—the patient is placed over a vessel and directed to strain (a vessel filled with hot water is best). If the tumors do not come within reach in this way, the finger should be thrust into the bowel, provoking tenesmus, and the patient again be instructed to force the piles down. When within reach,—the nates being separated by an assistant,—the tumors are seized one by one with a forceps and held, while with the hypodermic syringe from five to ten minims of a solution of nitrate of silver (one drachm to the ounce of distilled water) are injected into each, not stopping till all have been thus injected. No pain is felt except what is caused by handling parts rendered hypersensitive by protracted irritation.

One of the suppositories before mentioned may now be passed into the bowel, and thenceforth, if the treatment already given for removal of constipation may be followed up assiduously and patiently, little further inconvenience will be felt and no further treatment required. Even though the suppository be omitted, little pain is felt, and the patient goes at once about his business. The tumors immediately become hard, atrophy, and in about ten days have wholly disappeared. They can only recur from the cause which first produced them. Dr. Todd says that he has not had occasion to repeat this little operation in the same individ-

ual but once, which was in the case of an old gentleman, in whom tumors located higher in the bowel subsequently came down and were cured by the same means.

ACCIDENTAL ANTE-PARTUM HÆMORRHAGE.—Dr. Edward L. Partridge, of New York, Physician to the Nursery and Child's Hospital, contributes to the *New York Medical Journal and Obstetrical Review*, an article in which, after briefly reviewing the current doctrines concerning so-called accidental hæmorrhage preceding the birth of the child, he boldly challenges the expediency of the practice of rupturing the membranes. He believes, first, that rupture of the membranes does not meet the indications—i. e., it does not in itself or in its results offer any reasonable probability of checking the hæmorrhage—and, secondly that the method is highly dangerous from the increase of facilities for loss of blood, and because it adds to the difficulty and danger of the proper subsequent steps in treatment. The suggestion of Leishman to the effect that the placenta will be compressed between the uterus and the child after the escape of the liquor amnii, and hæmorrhage thus be checked, is, Dr. Partridge thinks, fanciful.

THE UTILITY OF STRYCHNIA AS AN EXPECTORANT.—J. Milner Fothergill (British Med. Jour.) says: The experiments of Rokitsky have shown that strychnia is a powerful stimulant of the respiratory centers, and I have arrived at the same conclusion from experiments upon rabbits. When the respiratory center was paralyzed by aconite the injection of strychnia exercised a most potent influence in restoring the circulation. I have used it clinically with much success, when the respiration was embarrassed, in acute bronchitis with difficult expectoration, in chronic bronchitis and emphysema, and when the right ventricle was dilated, it added to the efficiency of digitalis.

TREATMENT OF CYSTITIS.—Dr. A. J. C. Skene, of Brooklyn, gives the following, which he regards as almost specific in its influence, especially in the earlier stages, affording rapid and lasting relief: R. Acidi benzoici, sodii biboratis, aa grs. x.; Inf. Buchu ʒij. M. Sig. This quantity to be taken three or four times a day. The diet should also be carefully regulated, and the skin and bowels kept in an active condition.—*Cin. Lancet and Clinic.*

PROF. CHARCOT is not so familiar with the English language as with the nervous system. At the meeting of the International Medical Congress several English and foreign doctors were discussing the style of apparel most suitable for a reception which was to come off that evening. Prof. Charcot quietly observed, "As for me, I shall go in my night-dress."—*Medical and Surgical Reporter.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batelière, Paris.

TORONTO, FEBRUARY, 1882.

This Journal has the largest circulation of any Medical Journal in Canada.

PRACTICAL TEACHING.

The tendency of the teaching in the present day in all departments of science, is in the direction of the acquirement of a greater amount of practical knowledge, and the elucidation of all subjects capable of being demonstrated, by the use of practical modes and appliances. The use of instruments of precision, and the application of all known methods of observation and analysis, are being brought to bear on the solution of all difficult problems, both in nature and science. Men of science no longer grope in the dark when they have instruments of precision to aid them in searching for truth, and that they fully appreciate such aids in their labors is shown in the fitting up of costly laboratories for the work of instruction and investigation. Hence there have sprung up within a few years, schools of practical or applied science, physiological and pathological laboratories, &c., &c., where investigation and instruction go hand in hand. It must be conceded by all who have given any consideration to the subject of education, general or special, that, wherever practicable, this is the direction in which the training of the youth of the country should be directed. It has been well said by a great writer that the knowledge gained from books, however valuable, is of the nature of learning, but that gained from observation and investigation is wisdom. This is essentially true of all knowledge which is to have a practical outcome, and especially so in regard to the practice of medicine.

With a view to the practical instruction of candidates for the profession of medicine, in addition to the dissecting rooms for the acquirement of a practical knowledge of the anatomy of the human body, chemical, pathological and physiological laboratories have been established, some of them at great expense. In European countries great attention is being paid to the practical and clinical teaching of all candidates in medicine, and in our own country much has been, and is now being done every year, in the same direction. The medical authorities are thoroughly alive to the interests of the profession, and costly laboratories have been fitted up in McGill College and Bishop's College, Montreal, and also in Trinity Medical College, Toronto. It has been recently stated that an effort was about being made by parties interested in such a movement, to induce the Ontario Government to establish a chair of Physiology in connection with the School of Practical Science in Toronto. The establishment of such a chair for the teaching of this department, so far as embraced in their curriculum, would no doubt benefit the arts students in University College, but would not, as things are at present, be of any general service to medical education, but rather a detriment, as it would furnish an excuse to any parsimonious medical college for not equipping itself with suitable apparatus for teaching practical physiology. So far as medical education in Toronto is concerned, Trinity Medical College has taken the lead in this matter, and has, at her own expense, fitted up a well-equipped physiological laboratory, to which additions will be made from time to time, until it is made second to none, either in Europe or America.

The teaching of the practical branches, such as practical physiology, biology, chemistry, and botany, requires special preparation, and necessarily involves considerable time, hence it cannot, in the interests of the medical student be profitably engaged in during the winter session, when so much didactic and clinical work are upon his hands. It would be well, therefore, we think, to make arrangements for the teaching of these branches during the summer months, and this movement would be greatly facilitated if the Medical Council at its next meeting were to add a summer course of three months to the present curriculum. The present curriculum though no doubt high for a com-

paratively new country, is yet much below what obtains in most European countries. In Great Britain the curriculum in medicine extends over a period of four winter sessions of six months, and two summer sessions of three months; in Germany four years of nine and-a-half months each; in Austria and Russia five years of nine months each, in France four years of ten months each; Belgium five years; Holland six years; Italy six years of nine and-a-half months each; Norway six years; Denmark seven years, and Sweden ten years. The division of the periods of study in Great Britain is the one that seems best adapted to the genius of our people. Auxiliary faculties for the teaching of the classes during the summer months, might be appointed, and thus many meritorious young men would not only have an opportunity of bringing themselves into prominence, but also pass through a probationary period before being promoted, when found worthy, to vacant chairs in the main faculties.

We trust that the suggestions here thrown out, and the plan hurriedly sketched, may not be altogether lost sight of, as we sincerely believe their adoption, as soon as practicable, would be for the advancement of the best interests of the profession in Canada.

MEDICAL LIBRARIES.

We have before us the sixth annual report of the Boston Medical Library Association. Along with this report is also published the "Dedicatory Address" delivered by Dr. Oliver Wendell Holmes, of Boston, on the occasion of the dedication of the new building and hall of the Boston Medical Library Association, on December 3rd, 1878. The report and address contain much valuable information in regard to the formation of medical libraries in general, and much food for reflection in reference to the value of establishing such libraries in professional centres. This association, which is as yet in its infancy, having been only a few years established, has already become a permanent institution. The library contains upwards of 12,000 volumes, and is regularly in receipt of upwards of 280 periodicals. It stands sixth on the list of medical libraries in the United States, although founded as late as 1875. Much of the success is

due to the indefatigable efforts of the librarian, Dr. James R. Chadwick. The Hall, valued at \$20,000, is capable of seating two hundred persons, and is rented by all the medical societies of Boston for their meetings. The reference library contains over 10,000 volumes and nearly 6,000 pamphlets; and the circulating library upwards of 2,200. There are also capacious and convenient reading-rooms, well supplied with the current literature of the day. Many of the volumes in the library have been donated to the association by members of the profession in Boston and vicinity; some have been purchased from funds at the disposal of the association, and others have been obtained by way of exchanges.

The U.S. National Medical Library at Washington contains upwards of 60,000 volumes, and as many pamphlets, although only about fifteen years in existence. It is the largest medical library in the world. This rapid growth has been due to purchases, exchanges, and also in great part to the liberality and public spirit of many members of the medical profession in the United States. There are also two large medical libraries in Philadelphia and two in New York, besides others in various cities in the United States.

Dr. Holmes, in his dedicatory address, after alluding to the rise and progress of the medical associations in Boston, said "the time had arrived for a new and larger movement. There was needed a place to which every respectable member of the medical profession could obtain easy access; where under one roof, all might find the special information they were seeking; where the latest medical intelligence should be spread out daily, as the shipping news is posted on the bulletins of the exchange; where men engaged in a common pursuit could meet, surrounded by the mute oracles of science and art; where the whole atmosphere should be as full of professional knowledge as the apothecary's shop is of the odor of its mendicaments. This was what the old men longed for,—the prophets and kings of the profession, who

'Desired it long, but died without the sight.'

If such medical libraries are needed in Boston, New York, and Philadelphia, they are also needed, nay, urgently required, in Toronto, Montreal, Hamilton, London, and other large cities in Canada. The Hall of the College of Physicians and Surgeons in Toronto could be utilized with advan-

tage to the entire profession of Ontario for the formation of a medical library, and we have no doubt if it were formed, and a librarian appointed to look after the books, that many volumes now lying idle and covered up with the dust of years, would be contributed by some of the seniors in the profession for the general good. Others might also contribute magazines, periodicals, and recent medical books. A library to properly meet the need of our time, must contain an array of current medical periodicals, for these after all form the most attractive part of such an institution. The editors of the medical journals in Toronto and Montreal, we have no doubt would willingly supply a few periodicals and society reports from their exchanges, both home and foreign, which would aid materially in increasing the usefulness and value of this department. We would suggest to the Toronto Medical Society the propriety of appointing a committee to take this matter into consideration, and to report upon the best method of carrying the above suggestions into effect. We feel assured the medical council will willingly co-operate, as far as they possibly can, in any movement for the establishment of a medical library in connection with the College of Physicians and Surgeons of Ontario.

PRIVATE ASYLUMS FOR INSANE AND INEBRIATES.

The need of suitable private asylums for the treatment of a certain class of insane and inebriates is too apparent to require much comment at our hands. In all the larger asylums there is much danger from overcrowding, and besides, it cannot be expected that a large number of the patients under the charge of a Medical Superintendent and one or two assistants, can receive that share of personal and individual attention which may be obtained in a smaller Institution, hence, we are glad to find private asylums springing up in the United States and Canada, for the accommodation of those able to pay for their maintenance and treatment. Of course such Institutions should be, and are in some degree under Governmental supervision, as a guarantee of their suitability for the purpose aimed at, and of the integrity and good faith of those who undertake their establishment, as well as to ensure the confi-

dence of those who may place their friends under treatment. All asylums for the care of these unfortunate classes of patients should be made as pleasant, cheerful, and homelike as possible, and this homelike feature should be combined with all manner of innocent amusement. So far as we know there is but one private asylum for insane and inebriates in Canada, we refer to the "Belmont Retreat," Quebec. This institution has at the head of it Dr. Wakeham, a man of great experience in the management of the insane, and the building and surroundings are of the most desirable character. There are twenty-five acres of land in meadow, garden and lawn, which give employment to a number of patients, so that where the elements of cure do not exist, this at least makes their life pleasant and tolerable. The leading feature of this asylum is the treatment of insane, but the Superintendent holds a permanent licence from the Government to provide for a limited number of inebriates, and these are separate and distinct from the other patients. Several excellent institutions of this class exist in the United States, especially the "Shady Lawn," in Northampton, Mass., and "The Inebriates' Home," Fort Hamilton, L. I. The former is a private medical home for invalids, the treatment of lunacy, nervous diseases, ailments of women, and original methods of treating alcohol and opium habitués; and the latter is devoted entirely to the cure of alcoholism and the opium habit. Both gentlemen connected with these institutions, have had large experience in the special treatment of these affections, and may be confidently relied upon to do all that human skill can suggest for the relief of their patients. The patients treated at these asylums are of a higher social grade than the generality of those sent to the Provincial or State Asylums, and they enjoy a greater degree of retirement from the curiosity of the public than in the larger establishments. We would therefore commend these private institutions to the attention of the friends of those who are in a position to avail themselves of their benefits.

MEMORIAL TO THE HON. DR. ROLPH.—It is in contemplation to erect a memorial to the memory of the late Hon. Dr. Rolph in this city, if sufficient encouragement is obtained from his friends

and former pupils to warrant the undertaking. It is now twelve years since his death took place, at the advanced age of 83. For half a century his name was more or less familiar to the Canadian public. Owing to his long connection with medical teaching, and his pioneer labors in this direction, he was justly styled the Father of the Canadian medical profession. His body now lies in a neglected grave in the village of Mitchell, Ont., and it is, we think, almost a duty we owe to the memory of this great man, that his name should be perpetuated by some appropriate memorial.

Contributions with this object in view may be sent to this office, the receipt of which will be acknowledged in our columns.

OBITUARIES.—Mr. South, F.R.C.S., London, England, died on the 9th of January, at the advanced age of eighty-five years. Mr. South was for many years intimately connected with the College of Surgeons, having been elected to the Council in 1841, and served faithfully on all boards, courts, and committees. He was twice elected President. As an examiner he will no doubt be remembered by many as rather severe, and brusque in manner. It was through his efforts that the remains of John Hunter, which first found a resting place in the vaults of St. Martin's-in-the-Fields were re-interred in Westminster Abbey, and the inscription on the tablet in the latter place was from his pen.

The death of Prof. Draper, of New York, on the 4th of January, at an advanced age, is reported in our exchanges.

Nikolaus Pirogoff, the originator of the operation on the foot known as "Pirogoff's Amputation," died a few weeks ago in St. Petersburg.

Dr. Theodore Schwann, the eminent Belgian physiologist, is dead.

REMOVAL OF A CYST OF THE PANCREAS.—Dr. N. Bozeman reports in the *Medical Record* for January 14, 1882, the removal during life of a cyst of the pancreas, weighing 20½ pounds. The case is interesting from the fact that it is the first operation of the kind on record. It was mistaken for an ovarian cyst. Five years ago the abdomen began to enlarge on the left side, and gradually increased until the entire cavity was distended symmetrically. Upon opening the abdomen the

uterus and ovaries were found perfectly normal, and upon careful examination the pedicle was found attached to the junction of the outer third of the pancreas. It was transfixed and tied in the usual way. The patient was discharged cured on the 38th day after the operation.

REMOVAL.—J. Stevens & Son, surgical Instrument makers, have removed to larger and more commodious premises, No. 40 Wellington St. East, Toronto. This firm is supplying a want long felt in this Province, and has already by strict attention to business and careful consideration of the general wants of the profession, built up an excellent business. Our confrères need be at no trouble or inconvenience in regard to obtaining surgical instruments or appliances, on the shortest notice. The gentleman at the head of the Canadian branch of the business is perfectly reliable, and a good business man.

LISTER'S DRESSING MODIFIED.—Dr. Little, *New York Medical Journal*, of December, 1881, gives the following as his method of treating wounds which he has found very satisfactory. The wound is first washed in a solution of carbolic acid of the strength of one in twenty; the parts are then covered with a thin layer of borated cotton, and a simple gauze bandage is snugly and evenly applied. These thin bandages distribute the pressure more evenly over the cotton, and are more easily saturated with fluids than those made of unbleached muslin. The patient is instructed to keep the outside of the dressing wet with a solution of carbolic acid of the strength of one to one hundred.

THE RIGHT TO BEAR ARMS.—Daniel Webster once took a young lady, a relative of his son's wife, to task for wearing short sleeves, and animadverted on bare arms. "Why, Mr. Webster," exclaimed the young lady, "I'm astonished that you, the great expounder of the Constitution, should object to bare arms!" "What has my expounding the Constitution got to do with it?" growled Daniel; to which the young lady replied: "Doesn't the Constitution say that the right to bear arms shall not be interfered with?" History does not record the effect of this shot, but Webster died that same year.

BORACIC ACID IN GONORRHOEA.—Dr. A. J. Roe (*Mich. Med. News*) says he has treated a great many cases of gonorrhœa by means of boracic acid injections, and his results are very satisfactory. He employs the acid in the strength of ten grains to the ounce of water, morning and evening, after urinating. This treatment usually allays the inflammation, and relieves the pain and chordee, inside of thirty-six hours, and complete cure is generally effected inside of a week or ten days.

AMYL NITRITE IN OPIUM POISONING.—Dr. Turner in the *St. Louis Courier of Medicine* gives his experience in the use of amyl nitrite in two cases of opium poisoning. The effect of the amyl nitrite was to increase the number of respirations, and rapidity of the pulse almost instantly, and by continuing the inhalation at intervals for an hour or two, he had the satisfaction of seeing his patients recover.

INFANTILE ECZEMA.—The following mixture has been found very beneficial in the treatment of this perverse affection, viz: Oil of cajuput one drachm combined with one ounce of zinc ointment. Dr. Claiborne of Virginia (*Gaillard's Medical Journal*) discovered its value through a mistake by his druggist, who put it up in a mixture instead of oil of cade which was ordered. It cured the patient and many others since.

MEMORIAL TO ERICHSEN.—It is proposed by the friends of Mr. Erichsen, of University College London, to erect a marble bust of that gentleman, to be placed in the University as a mark of respect for his long connection with its Medical School.

APPOINTMENTS.—Dr. Charles O'Reilly medical superintendent of the Toronto General Hospital, has been appointed examiner in clinical medicine and surgery, for Toronto University, Dr. I. H. Cameron, in anatomy and surgery, and Dr. Ellis in Chemistry. The remaining examiners in medicine are the same as last year; viz.: Drs. Eccles of London, D. B. Fraser of Stratford, and Geo. Wilkins of Montreal.

Dr. J. R. Kippax, formerly of this city, has been appointed on the acting staff of the Cook County Hospital, Chicago, in conjunction with five co-professionals, in accordance with the recent action of the board for dividing the appointments to this hospital between allopathic and homœopathic physicians.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

Nov. 17th, 1881. The Society met at 8.30 p.m., the president in the chair. The minutes of last meeting were read and approved.

Dr. Macdonald showed a vermiform appendix, taken from a patient who, for some days prior to his death, had been suffering from localized peritonitis in the region of the cæcum; the appendix showed two points of ulceration, with perforation, and in its interior it contained a hardened nodule of fecal matter, which was situated between the points of ulceration.

Dr. Nevitt mentioned a case of fecal impaction, where there was perforation, death resulting in 36 hours.

Dr. Cameron next showed a case of pseudo-hypertrophic muscular paralysis in a lad aged 11. He gave a detailed account of the family history, which showed that the disease could not be traced in any of the patient's ancestors or members of his own family; the patient was quite well until about 3 years of age, after that there began to be loss of power, and feats of strength and agility which he could not perform, were easily accomplished by children of more tender years, while the excessive enlargement of the muscles of the calf was the subject of much admiration. The patient when placed on his back, has no power to regain the erect posture without assistance, and his mode of progression is peculiar, especially when he ascends the stairs. There is excessive prominence of the gastrocnemii and solei, while the muscles of the brachial region are somewhat wasted, and there is well marked lordosis.

The treatment adopted is by the administration of cod liver oil, syr. iodide of potash, and arsenic. The P. M. lesion is always the same in the muscles, but there is want of uniformity in the lesion in the cord.

The president then mentioned several cases which had recently come under his notice, among which were, 1st, a case of ovarian tumor, which was a multiple cyst, and contained about 50 lbs. of fluid in its interior; 2nd, a gun-shot wound of the arm, in which there was no discharge from the track of the ball, the wound having been dressed under the spirit lotion. He also mentioned the beneficial effect hyoscyamine had in quieting patients suffering from acute mania, given in doses of

$\frac{3}{8}$ to $\frac{1}{2}$ grain, and also related the effects the dose of $\frac{3}{8}$ grain had upon himself.

Dr. Rosebrugh then read his paper on "Electricity in the Treatment of Special Diseases," a full report of which has appeared in the CANADA LANCET.

Dec. 1st, 1881. The Society met at 8.15 p.m., the president in the chair. The minutes of the last meeting were read and approved.

Dr. Going was proposed a member of the Society.

Dr. Oldright then showed a man who, eighteen months ago, had received a comminuted fracture of his right tibia and fibula in their lower third; six weeks after the accident, the fractured limb became swollen and cedematous, and some time afterwards the sound limb also became swollen. The case, as presented to the Society, showed great swelling and cedema of the affected limb, and an indolent ulcer on its anterior and inner surface. The patient is of temperate habits, he has no cardiac affection, and the urine, when examined shortly after the accident, was found normal. Dr. Oldright asked for a solution of the case, but an answer was wanting.

Dr. Graham next exhibited a girl, æt. 5, whose mode of progression was awkward and difficult, and the appearance simulated somewhat that of hip disease; the affection has always existed. Dr. Graham had seen three cases similar to this disease; tendon reflex, although absent in this case, is well marked in some. Drs. Canniff, Oldright, Cameron and others discussed the case.

Dr. Cameron exhibited a piece of gravel (about the size of a small castor-oil bean), which he had removed, after it had existed in the external auditory canal for two and a half years without symptoms.

Dr. Graham showed a piece of cotton wool which he had removed from the naris of a child, where it had been lodged three or four years, and in consequence of which the child suffered from ozæna.

Dr. Rosebrugh then read a continuation of his paper on "Electricity in the Treatment of Special Diseases." Dr. Rosebrugh, of Hamilton, being present, made a few remarks upon the paper.

The Society then adjourned.

Books and Pamphlets.

TEXT-BOOK OF MODERN MIDWIFERY, by Rodney Glisan, M. D., Prof. of Obstetrics in the Willamette University, Oregon. Philadelphia: Presley Blakiston. Toronto: Willing & Williamson.

Obstetric text books are already as thick as leaves in Val Ambrosa, and by some, probably the *raison d'être* of a new competitor might be questioned. The author, however, believed that there was a demand for a work which should more thoroughly represent American obstetric practice, and most ably and pointedly has he accomplished his task. The work will deservedly rank high among the numerous treatises on the science and practice of Midwifery, embodying as it does all recent views and acknowledged improvements in practice. The young practitioner and also the more experienced, will find this volume a useful guide in the most anxious and responsible branch of the profession. The chapters on the anatomy of the pelvis, mechanism of labour, face presentations, hæmorrhage before and after labour, and on other subjects, are clear and concise. The author, like most other American practitioners, inclines to the position on the back in delivering with forceps, applying the blades to the sides of the child's head, whether the latter be below or above the superior strait, arguing that although the application of the instrument to the sides of the pelvis has simplicity in its favour, yet in proportion to the favour it receives will be the decrease in the knowledge of the mechanism of labour by those who practice it. The work has been well brought out by Presley Blakiston, in binding, type and paper. The illustrations have been obtained chiefly from the works of Cazeaux, Meadows, Playfair, Leishman, Churchill and Hodge. Cloth, \$4.00; sheep, \$5.00.

ECZEMA AND ITS MANAGEMENT, by L. Duncan Bulkley, M.D., New York. New York: Putnam's Sons. Toronto: Willing & Williamson.

Sir Erasmus Wilson remarks, "That to be a successful practitioner in the treatment of eczema, a medical man must be an accomplished physician: to manage the local treatment with success he must also be an able surgeon. In a word the highest and best qualities of medical art and science must be put in practice with foresight and discretion for

the treatment of an eczema." The author of the above treatise has proved conspicuously that he is both, and in the pages of this work the general practitioner will find lucid and succinct descriptions of the various phases of the disease in question, as also guides to their recognition and management. The author has divided the subject into sixteen chapters, i. e., definition, frequency, symptoms, forms, diagnosis, nature, (constitutional or local) causes, treatment. Management of infantile, of the face and scalp, of the hands and arms, of the feet and legs, of the anus and genitals of the trunk. Diet and hygiene of eczema; therapeutics of eczema. Dr. Bulkeley, while contending for a constitutional origin, admits that it may become a local disease in its skin lesions, and as such may very largely be amenable to local treatment. We can heartily recommend this new addition to the literature of eczema to our medical brethren, being well assured that a perusal will greatly assist them in the treatment of this too frequent opprobrium medicorum. The book is well printed on fine paper, and is a credit to the publishers.

A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM. By William A. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in the Medical Department of the University of the City of New York. With one hundred and twelve illustrations. Seventh Edition, rewritten, enlarged and improved. New York: D. Appleton & Co. Toronto: Willing & Williamson.

We have much pleasure in calling the attention of the profession to this revised edition of Dr. Hammond's well-known and popular work on nervous diseases. The present edition has been greatly enlarged and improved. The chapters on insanity have been omitted, for the reason that the author is now engaged in the preparation of a special treatise on this important subject. There has been considerable amplification of the chapter on cerebral congestion, a new chapter on myxœdema, and others on syphilis of the brain, spinal cord and nerves, also a new section on diseases of the sympathetic nervous system. Material additions have also been made to the chapters on locomotor ataxia, progressive facial atrophy, chorea, epilepsy, neuralgia, etc. We regard Dr. Hammond's work as excellent authority on the subject of nervous diseases, and frequently refer to it in our study of these affections.

A MANUAL OF HISTOLOGY. Edited and prepared by Thomas E. Satterthwaite, M.D., President of the New York Pathological Society, Pathologist to St. Luke's Presbyterian Hospital, etc. With one hundred and ninety-eight illustrations. New York: William Wood & Co. Toronto: Ure & Co.

The author has associated with him in the work of preparing this book for the press, Drs. Thomas Dwight, J. Collins Warren, William F. Whitney, Clarence J. Blake, and C. H. Williams, of Boston; Dr. J. Henry C. Sims, of Philadelphia; Dr. Benjamin F. Westbrook, of Brooklyn, and Drs. Edmund C. Wendt, Abraham Mayer, R. W. Amidon, A. R. Robinson, W. R. Birdsall, D. Bryson Delavan, C. L. Dana, and W. H. Porter, of New York. The work, therefore, represents the combined wisdom of several eminent American histologists, each article being written by one who is considered an adept in his particular rôle. As a manual, it is full and comprehensive, the cuts numerous and tolerably accurate, and the directions for preparing and mounting, clear and easily followed. It will be found of great value to the student of histology, and we cordially commend it to all who desire to study this attractive branch of medicine.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM. Being a study of this portion of the human body from a standpoint of its general interest and practical utility, designed for use as a Text-Book and a work of Reference. By Ambrose L. Ranney, A.M., M.D., Adjunct Professor of Anatomy in the Medical Department of the University of the City of New York. New York: D. Appleton & Co. Toronto: Hart & Co.

In this work the author has endeavoured to bring before his readers the anatomy of the nervous system, associating with it a brief description of the diseases met with in connection with the structures affected and the symptoms which accompany them, the object being to fit the practitioner and student to pursue his studies in this special line without embarrassment. The treatment of nervous diseases is not touched upon. The work abounds with illustrations, some original, but most of them drawn from other well-known works. They are all well executed, and reflect great credit upon the publishers. The work is worthy of the special attention of those who are working up the subject of nervous diseases.

A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. Lewis Smith, M.D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, Fifth Edition, thoroughly revised, with illustrations. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

We gladly welcome to our shelves the new edition of this highly valuable, and deservedly popular work on diseases of children. The work has undergone a thorough revision, and some new matter has been added, notably a chapter on strumous ophthalmia. The author is very full and explicit in the matter of treatment, a most gratifying feature in modern text-books, in many of which too little attention is devoted to such details. We can confidently recommend this work a most reliable guide in the treatment of children's diseases. The new volume comes to us in the elaborate half Russia binding recently adopted by this well-known publishing house.

LECTURES ON THE DIAGNOSIS AND TREATMENT OF THE CHEST, THROAT AND NASAL CAVITIES, by E. Fletcher Ingals, A.M., M.D. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

These lectures, thirty-two in number, are a valuable addition to extant works on the same subject. They set forth concisely, but very clearly, what is known on these diseases, and will be found both to practitioner and student, of great value in forming a differential diagnosis. The chapters on "Physical Diagnosis," "Percussion," "Auscultation," and "Heart sounds," are well calculated for teaching the young beginner exactness. The work is well written, and bears evidence of the writer being a master of the subjects discoursed on. The appendix contains a number of useful formulæ.

A PRACTICAL TREATISE ON HERNIA. By Joseph H. Warren, M.D. Second and Revised Edition. Illustrated. Boston: James R. Osgood & Co. Octavo, pp. 428. Price \$5.

This is a very carefully prepared text-book on hernia, practical, well illustrated, and rich in clinical details. The author has given the profession in the work before us not only a good digest of the literature on this subject, but also a mine of practical experience. Everything of value and importance connected with this subject has been embodied in this work, and therefore we heartily commend it to the attention of the profession.

LANDMARKS, MEDICAL AND SURGICAL, by Luther Holden, F.R.C.S., Eng., Consulting Surgeon to Saint Bartholomew's and the Foundling Hospitals. Assisted by James Shuter, M.A. Camb., F.R.C.S. From the third English edition, with additions, by William W. Keen, M.D., of the Philadelphia School of Anatomy. Philadelphia: Henry C. Lea's Son & Co. Toronto: Hart & Co.

Holden's Landmarks are well known and highly appreciated by the profession both in Europe and America, and the issue of the third edition fully attests its continued popularity. The additions by Dr. Keen of Philadelphia still further enhance the value of the work.

THE OPIUM HABIT AND ALCOHOLISM. A Treatise on the Habits of Opium and its Compounds; Alcohol; Chloral Hydrate; Chloroform; Bromide of Potassium; and Cannabis Indica; including their therapeutical indications. With suggestions for treating various painful complications. By Dr. Fred. Herman Hubbard. New York: A. S. Barnes & Co. Toronto: Willing & Williamson.

This work treats principally of the opium habit and alcoholism, a few chapters only being devoted to chloral hydrate, chloroform, etc. The management of this unfortunate class of patients, which seems yearly on the increase, is laid down with great care and precision, and the work contains much that will interest the general reader.

THE PRESCRIBER'S MEMORANDA. New York: Wm. Wood & Co. Toronto, Hart & Co.

This is an excellent reference book, and contains many useful and valuable hints upon disease and its treatment. It will be found very convenient for occasional reference.

Births, Marriages and Deaths.

At Adolphustown, on the 18th of December, 1881, Joseph Allen, M.D., aged 34 years.

On the 20th of Oct., Dr. J. B. Smith, of Jerseyville, Ont., aged 27 years.

At Norwich, on the 11th of Dec., Dr. Gabriel Lount, aged 43 years.

On the 11th ult., at Grand Haven, Mich., Dr. A. J. Whitehead, aged 29 years.

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Original Communications.

LESIONS OF THE CENTRAL NERVOUS SYSTEM, OF PERIPHERAL ORIGIN. BY CH. TALAMON, REVIEW BY DR. A. LEONE.

(Translated from "Il Pisani Gazzetta Sicula," Palermo.)

BY JOSEPH WORKMAN, M.D., TORONTO.

The cerebro-spinal nervous axis is put into *rapport* with the various parts of the economy by means of two orders of conducting cords; one, forming the afferent system, transmits by the grey substance the impressions received at the periphery; the other, forming the efferent system, transmits movements and nutritive influence to the organs. The lesions of the latter—the centrifugal order—are at the present time very well known, because it has been almost exclusively to these that modern clinical and physiological studies have been directed. On the contrary, the lesions of the afferent apparatus have been left in obscurity.

Some histological and physiological researches by Leyden, Vulpian, Ghazem, and others, give us some precise notions of the alterations of the cerebro-spinal axis, consecutive to lesions of the extremities of the nerves—alterations which, heretofore, have been regarded as coming from primitive lesions of the central nervous substance, and not as the consequence of an affection localized in the periphery of the nervous system. It is on facts of this class that we propose to treat in this work.

We shall, first of all, study the results which pathological anatomy seems to have brought clearly into view, that is to say, the *atrophic modifications* observed in the central nervous system following the amputation of a member. In the second place, we shall speak of irritative lesions, experimental or pathological, observed to follow peripheral excitations. In the third place, we shall

speak of certain symptoms or phenomena observed through centripetal irritation of the nervous centres.

CHAPTER I.

Of atrophic lesions of the nervous centres following the removal of a member.

A. *Lesions of the medulla.*—Laney and Basard had already noted, with the naked eye, an atrophy of the medulla or of the nervous roots in persons who had undergone amputations and had died a long time after the operation; but both the observations are incomplete. Besides these two, no others were found in the science related to this subject up to 1868, when Vulpian, in a memoir published in the *Archives of Physiology*, and Dickinson in another, published in the *Journal of Anatomy and Physiology*, reported several cases of atrophy more or less diffused in the parts of the medulla corresponding to the amputated member. In the greater number of the cases published by these two authors, the atrophy was observed more usually in the posterior fascicles than in the anterior, of the medulla.

After Vulpian and Dickinson, other observers, among whom are the two Italians, Buffalini and Rossi, have published analogous results. In 21 cases of amputation the following were the alterations found in the medulla:

1st. *In the white substance.*—Atrophy in the posterior cords in 17 cases, and in the anterior only in a few cases.

2nd. *In the gray substance.*—Atrophy, according to Vulpian and Dickinson, is more often in the posterior cornua than in the anterior; but neither Vulpian nor Dickinson have ever observed histological modifications, or diminution of the number of the cells, or atrophy of them. In one case alone, of amputation of the left leg, Vulpian found a very limited destruction of small islets in the gray substance. Geuzmer, in a case in which amputation of the thigh dated back almost 30 years, found diminution of the number of the nervous cells and a great diminution in their size. Lastly, in an observation of Hayem in a case of amputation of the thumb, there was found, besides general atrophy of the anterior cornua corresponding to the injured side, a great number of atrophied cells and some irritative lesion, not only on the atrophied side, but also on the other side; lesions analogous to those of a chronic central myelitis.

3rd. *In the nervous roots.*—Dejerin and Meyer, in three cases observed by them, found no alteration in the cut nerves; but Dickinson and Geuzmer observed atrophy in the nervous roots, apparently, according to Dickinson, in the posterior, but according to Geuzmer, in the anterior roots.

B. *Lesions of the brain.*—Dickinson, in four cases in which the operations took place many years before death, met with no appreciable anatomical modification in the cerebral hemispheres. The atrophy observed in the medulla extended to above the lumbar enlargement in the cases of amputation of the lower limb, and as far as the bulb at the superior limit of the decussation of the pyramids, in cases of amputation of the arm, but never above this point. Other observers have not been more successful.

The experiments of Fritsch, Nitzig and Ferrier, and the pathologico-anatomical researches of Charcot, have demonstrated the existence of atrophy in certain peripheral regions of the brain (the pretended motor zones) following the remote ablation of corresponding members (that is to say, the alteration was found on the right side when the mutilation had been on the left, and *vice versa*).

In contradiction of these facts, Brun, Pitres, Féré, Major, and others, in cases of ancient amputations, found the cerebral hemispheres in all their convolutions in a state perfectly normal. Yet the facts demonstrating atrophy are of much greater number.

Outside the cases of amputation, studies have been made in those in which the patients have been long condemned to inaction, either from paralysis of a given member or from chronic articular rheumatism. *Example*—Landouzy, in a man who had arrest of development of the right leg, found the left hemisphere of less volume than the right. Oudin, in a woman who for 67 years had not used the right leg, found atrophy of the first frontal convolution at its union with the ascending frontal. See, in a subject whose right arm had been atrophied, observed that the left ascending parietal convolution was much smaller than the right. Luys, in a case of chronic rheumatism of three years' duration, found the same alteration.

CHAPTER II.

Irritative, experimental, or pathological lesions, observed in the motor nervous centres in sequence to peripheral excitations.

1st. *Experimental pathology.*—In these researches physiologists are divided into three classes. Some,

as Roessingh, Rosenstein, Rosenbachs, and Vulpian, have never observed either medullary lesion or lesion along the superior end of the irritated nerve; others, as Tiesler and Feinberg, have, in a certain number of cases, met with some considerable alterations in the spinal axis, consecutive to localized inflammation in a part of the nerve, as far as the central parts.

We shall speak of the affirmative experiences of these authors. The lesions observed in the medullary axis, following irritation of the peripheral nerves, appear both in the involucre of the medulla and in the medullary substance itself, in the gray as well as in the white substance.

As to the lesions of the meninges, we may say that they have been met with in great frequency, if not, indeed, with constancy; and they vary from a simple hyperæmia to a focus of suppuration. Klemm observed in rabbits a sero-sanguinolent opacity in the dura mater, at the point where the irritated nerve is implanted in the medulla; in other cases he found a sort of inflammatory proliferation of the adipose cellular tissue in this membrane. In a cat he met with a true spinal pachymeningitis, having its origin at the point of emergence of the irritated nerve. In an experiment of Tiesler, reported by Professor Charcot, on a rabbit, dead paraplegic, three days after the application of an irritant agent on the sciatic nerve, saw a primary purulent focus in the thickness of the nerve at the point irritated, and another focus of suppuration in the vertebral canal, around the roots of the sciatic, near their emergence.

With regard to the lesions of the medullary substance, the studies have been carried out chiefly by Prof. Hayem on rabbits, both after eradication of the sciatic nerve, and irritation of it by acids, or by a needle dipped in nicotine. The alteration was diffused in the whole length of the medulla; first it appeared on the posterior cord, at the level of the origin of the nerve injured, afterwards it invaded the gray substance. "*In all the cases,*" says this author, "*it above all affected the external and posterior group of the anterior cornu, and the cells of this group only were altered when the lesion was less pronounced.*"

The medullary alterations observed by Feinberg, although the description is given with less particularity, are of the same nature. In three of his experiments, by means of irritation of the sciatic with

potassa, he found a diminution of the consistence of the medulla, above all in the gray substance of the lumbar region. Under the microscope, the gray substance appeared completely disorganized, and in part the white substance also. In the experiment of Tiesler, before cited, the medulla, at the point corresponding to the emergence of the irritated nerve, was softened and infiltrated with granulous bodies and leucocytes.

On the contrary, Klemm only once met with myelitis as a consequence of irritation of the sciatic; the inflammation, in his experiments, appeared to be constantly limited to the meninges.

The experiments hitherto cited show that the irritation of a nerve on the periphery may give place, at one time to a spinal pachy-meningitis, at another to a spinal meningitis, and again to a myelitis. But it is asked, What is the path taken by this inflammation in order to be transmitted to the medullary axis?

Klemm injected into a rabbit, with the syringe of Pravaz, some drops of a solution of arseniate of soda, into the sheath of the sciatic. The irritation thus provoked at the point of application was propagated thence to various points of the nerve, both above and below. There was thus formed an ascending and descending neuritis, proceeding by bounds here and there, in a manner very irregular, along the nervous cord, especially showing itself at those points where the arterial vessels penetrate the sheath of the nerve. This was called by Klemm *disseminates neuriti*.

Niedieck, in his experiments, found analogous results. He cauterized the sciatic with nitrate of silver and with chromic acid; the primary alteration was a focus of suppuration at the point of application of the caustic, and, next, the inflammation was propagated in patches along the nervous trunk.

Finally, in 1874, Hayem, who had regarded the neuritis of the upper end at the point irritated as exceptional, established himself, the fact of inflammation of the interfascicular conjunctive tissue along the nervous cord. He saw the cylinder axis swollen and beaded, in granulous degeneration, with proliferation of cells. It appears, therefore, that the irritation is propagated by means of the centripetal cord, following the conjunctive tissue and the nervous tubes into the central cells.

These are the facts obtained by experimental pathology on animals, and we shall now seek to compare them with the phenomena of the same order observed in human pathology.

2nd. *Clinical facts*.—In this division of the chapter we shall show that centripetal irritation of nerves is often, after some time, followed by, at one time signs of muscular atrophy, at another by signs of locomotor ataxia—phenomena which supervene on defect of anatomical control, and in themselves prove the central lesion.

One of the most notable consequences of experimental neuritis propagated to the medulla, is the *rapid muscular atrophy* observed in the animals operated on. This modification in the nutrition is in *rapport* with the degenerative alteration described by Hayem in the cells of the anterior cornua; this shows the trophic influence of these cells. Now it is certainly worthy of attention that in clinical observance the phenomenon most frequent in centripetal irritation of the spinal axis is exactly atrophy of the muscles.

Vulpian speaks of a soldier who, in 1870, received a gunshot wound at the union of the inferior third with the middle third of the right leg. At the end of a month he recovered and resumed service. In 1875 he perceived a sensation of formication and of stunning at the point of the cicatrix, and afterwards enfeeblement in the whole limb. At the same time he discovered that the whole member affected was continually becoming more atrophied. The circumference of the right thigh was four centimetres less than that of the left one.

Hayem publishes a similar case, in a man who received a gunshot wound in the leg in 1871, and in 1874 signs of atrophy and paralysis were manifested. In these observations the muscular atrophy shows the seat of the lesion to be in the gray substance of the medulla.

We shall record other examples in which the paralytic and atrophic manifestations were produced in regions far from the member primitively injured. Thus Charcot, in 1856, records the case of a man who had diffused phlegmon in the *left* forearm, for which some incisions were made by a surgeon; one of these incisions fell upon the radial nerve. A short time after, the patient began to feel pains and formication at the point of the cicatrix

corresponding to the radial nerve; then followed anæsthesia and paralysis, with atrophy of the muscles. At the end of about a year, he felt a weakness and torpor in the *right* forearm.

Vulpian, in the Hospital La Charité of Paris, observed a fact of the same order. A man suffered a scalding of the left hand, such as to destroy it, leaving to him only two fingers in the form of pincers. After some time the right arm weakened and atrophied; and afterwards, despite of faradization, the muscular atrophy progressed to the muscles of the arm and the shoulder. Brown Sequard, Leyden, LeDentu, and Ferrier report other examples of the same order. But the finest example of atrophy and paralysis is that of Pincet, of Cluny, in which the progressive extension of the lesions into the greater part of the medulla was observed. A soldier, in 1870, received a wound in the battle of Sedan; a ball which penetrated at two centimetres to the right of the sternum, went out at three centimetres below the spine of the scapula. The patient remained three days unconscious. On reviving, the right arm was seen paralysed. The wound healed in eight months, but notwithstanding the use of faradization, the arm remained paralytic.

In 1873 this patient entered the Hospital Val de Grace. The left arm was enfeebled, and had become similar to the right. In 1875 the lesion was perfectly symmetrical in both upper members; there was atrophy of the pectoralis, trapezius, deltoid and great dorsal muscles; also of the biceps, the anterior brachial, and all the posterior muscles of the forearm.

We cite, finally, two other examples, with anatomical observations. Leudet relates a case of sciatic neuritis, developed by asphyxia from the oxide of carbon. He saw, eight days after, a weakening first in the member corresponding to the neuritis, and afterwards in the member of the opposite side, and thence to the upper members, supervening. At the autopsy, neuritis of the right sciatic was realized.

Professor Duménil relates a case in which, following a contusion of the right sciatic at the nates, paralysis with atrophy and anæsthesia in the right limb was observed; in a year after, the upper limb of the same side was similarly affected. Three years after, the lower limb of the *left* side was

affected in its turn, and afterwards the upper one. Finally, the tongue also was involved. The autopsy showed chronic neuritis of the sciatic, and medullary lesions, chiefly in the posterior cornua; the vessels were dilated and varicose, there was infiltration of granulous globules with hyperplasia. The white substance was little or not at all altered.

From these anatomical observations, and many others made by Vulpian and Dickinson on persons who had undergone amputations at remote dates, it has been shown that in the posterior parts of the medullary axis the centripetal irritation has principally its seat.

It is also known, from the observations of Hayem, that the inflammation is propagated across the internal radicular fibres to the externo-posterior cellular group of the anterior cornua. Unless it be now forgotten that ascending lesions in the spinal axis are effected by means of the posterior cords, we have quite sufficient to enable us to account for the cases of locomotor ataxia, which sometimes supervene in sequence to inflammation of the peripheral nerves. Here are some examples: H. Petit relates the case of a man who, in November, 1859, suffered a contusion in a toe of the left foot, from a bar of iron falling on it. In February, 1860, he had lancinating pains in the left foot and leg, and a short time after, pains also in the right, but lighter, so that they yielded to a little rest. Progressive evolution of symptoms of ataxia followed. M. Duplay published in the *Archives of Medicine*, the case of a man who, in the Crimean war, had a foot frozen, and was afterwards taken with fulgurant pains in the lower limb, and at a later date with ataxic titubation; in 1875 all the classic symptoms of sclerosis of the posterior cords presented. Nicaise observed an analogous case in the hospital of Bicetre.

It may be admitted that in these cases the freezing, or the wound, determined a neuritis of the cutaneous nerve branches, next in the principal trunks, and thence into the posterior parts of the medulla.

Another example has been published by Prof. Vulpian: A man, in 1855, underwent amputation of the right leg. In 1873 the left leg became, by little and little, weak and flexible. The foot, in walking, was thrown inwards. A year after, fulgurant pains in the left inferior limb supervened.

In 1877 it was observed that this member had emaciated in its whole bulk. With the eyes shut, he walked hesitatingly. Sensibility was diminished, and the fulgurant pains were severe. On the side operated on, nothing analogous to what happened on the sound side was observed.

In summary then, all the facts which we have passed in review demonstrate :—

1st. That the peripheral irritation of a nerve may determine in the nervous cord, and in the central axis, inflammatory modifications. 2nd. That these inflammatory lesions are produced either in the involucre of the medulla, or in those of the nerve ; on the constituent elements of the conducting cord, and of the medullary axis. 3rd. That the medullary lesions have their seat principally in the grey substance, but they may extend also to the white substance. 4th. That they may be limited to the meninges, according to the observances of Klemm. 5th. That in the majority of the cases, if not in all, the propagation of peripheral irritation to the medulla is effected by means of the centripetal cord, under the form of a neuritis, now disseminate, or again continuous, having its seat in the interstitial connective tissue, and probably also in the nerve tubes. 6th. That these central lesions are often manifested with predominant muscular atrophy, and in some cases with signs of locomotor ataxia.

B. Lesions central, produced by irritation of visceral nerves.—We are now interested in seeing whether lesions of the internal organs may bring about consequences on the nervous centres, in the same manner as the peripheric lesions of members. A great number of facts published under the name of reflex or sympathetic paralysis, have no other known pathological mechanism.

It was observed in an individual who for several years had suffered under an affection of the urinary passages, that without appreciable cause a dorso-lumbar myelitis more or less rapidly was developed. Gull, combating the vaso-motor theory of Brown-Sequard, showed that urinary paraplegia supervenes principally in those individuals who, for several years, have suffered from vesical or urethral diseases. Leyden records an observation, in which, in sequence to a cystitis from cold, with retention of urine, symptoms of paralysis appeared at the end of four weeks ; at the autopsy there was found a red softening of the lumbar medulla. An Italian

author, Namias, observed a case of central atrophy of the medulla, consecutive to a chronic enteritis, in a woman of 38 years.

Wier-Mitchell says that, in some cases observed by him, "*intestinal diseases had produced effusions and medullary softenings,*" and that the scrofulous and the scorbutic are often subject to softening and chronic myelitis. But he does not give any details, nor cite any autopsy. Leyden has published his observance of a man, who, in sequence to dysentery, had symptoms of a lumbo-sacral neuritis, to which there succeeded those of an ascending spinal meningitis, mounting up to the superior dorsal region. In a memoir of Zabriskie, we read the following fact : A boy entered the hospital with chronic diarrhœa, which had so weakened him that his lower limbs had become paralyzed both in sensation and motion ; his evacuations passed involuntarily, and he died from marasmus. The intellectual faculties had remained sound. At the autopsy, extensive lesions were found in the small intestines. The medulla and its involucre did not present, to the naked eye, any alteration. All the viscera were sound. But though the author realized the integrity of the medulla by the naked eye, the complete paralysis of sense and motion, and the paralysis of the sphincters, prove the existence of lesions in the grey substance of the medullary axis, which would not have escaped microscopic examination.

All these facts, above exposed, establish, though not in a very definite manner, the possibility of medullary lesion as a consequence of inflammation of the viscera. But as yet the studies have been rather defective : there have been observed only these few cases in the urinary and intestinal organs, of medullary affections consecutive to irritation of the visceral nerves. As regards lesions produced by irritation of the other viscera, no example is known.

It remains also to know by what mechanism the visceral affection is transmitted to the central nervous system. Gull admits that the inflammation may be propagated, in certain cases, by the veins, to the rachidian plexuses, and thence to the involucre of the medulla. But the more rational hypothesis is that offered by Leyden, and supported by Charcot, that is, the centripetal propagation of the irritation through the nervous trunks ; and this accords with the observations of Leyden, who, in

several cases of urinary paraplegia, and in one case of dysenteric paraplegia, found, in addition to dorso-lumbar-myelitis, neuritis of the branches of the lumbo-sacral plexus.

(To be continued).

QUARTERLY REPORT ON THE PROGRESS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

THE TREATMENT OF EPILEPSY.

(1). *Bromides*.—M. Hublé, under the direction of Bourneville, has employed the monobromide of camphor, bromide of zinc, bromide of arsenic, and the bromide of sodium in cases of epilepsy, where the bromide of potassium given for a lengthened period failed to be of any service. The patients were all inmates of the Salpêtrière. The cases were mostly aggravated ones in old people.

The following are the results obtained by Hublé: The *monobromide of camphor*, given in doses of 10 to 60 grains in capsules, is especially useful where vertigo is a prominent symptom. It produces a profound sedation, which prevents the diverse nervous manifestations which accompany the attacks, such as insomnia, post-epileptic delirium and maniacal excitement. It was never found to cause bromide intoxication.

Bromide of zinc is a powerful sedative, especially to the medulla and spinal cord. It has a similar action to the bromide of potassium, but it has fewer inconveniences. Given in doses of 50 to 60 grains per day, it was found never to cause cachexia or cutaneous eruptions.

The *bromide of arsenic* has also been successfully employed in diminishing the frequency of the epileptic paroxysms. It can be given in doses up to one grain without producing any inconvenient symptoms.

The *bromide of sodium* causes, in very large doses, cachexia, but never the profound cachexia which is induced by large and long-continued doses of the potassium salt. Of all the potash salts, the bromide has the most deleterious influence in this way. In many cases the bromide of sodium had a very beneficial influence.

Hublé does not draw any comparison between the four different bromides, as he thinks his number of observations (46) are too few to warrant any conclusions as to their respective merits.

(2). *Statistics as to the influence of the bromides in epilepsy*.—Ferrand gives details of 89 cases of epilepsy treated by bromide of potassium. In 12 cases a complete cure is said to have resulted. Considerable improvement followed in 51 of the cases, a slight improvement in 16, while 10 were made worse or not influenced by the drug. The bromide was given to females in doses of 75 to 90 grains per day, and to males in doses of 90 to 120 grains daily. After a case is free from fits for one year, the drug is given during six days of the week, and towards the end of the second year it is given three times a week. Ferrand prescribes arsenic in conjunction with the bromide, to prevent the development of acne, and when the bromide dose exceeds 100 grains daily, he gives coffee to prevent its soporific effects.

Hughes Bennet has published the results of the treatment of 117 cases of epilepsy. In 14 cases there was a complete disappearance of the fits, a diminution of them in 97 cases, no change in 3 cases, and 3 cases were made worse. Bennet gives 30 grains of equal parts of the bromide of potassium and ammonium in infusion of quassia, three times daily. If these doses are not sufficient, they are gradually increased until 80 grains three times a day can be taken. Of all chronic nervous diseases, Bennet considers epilepsy the most amenable to treatment.

(3). *Atropine*.—Laskiewicz considers that atropine is the best treatment for epilepsy, when the bromide of potassium fails. Köllner has lately used atropine in the treatment of epilepsy, also. He injects subcutaneously a milligramme ($\frac{1}{64}$ gr.). It appears to have a considerable influence, not only in preventing frequent attacks, but also in mitigating the severity of those which do appear. In the period between the fits, Köllner considers that the mental condition of those treated by atropine is much better than those treated by bromide of potassium.

(4). *Curare*.—Edlefsen, of Kiel, has used curare in 13 cases of old and severe epilepsy. In 6 little or no effect was noticed, 3 cases were completely cured, and 5 were considerably improved; the 13th case was still under treatment.

Prof. Benedikt, of Vienna, has also lately used curare in a few cases of epilepsy, with success. Owing to the exceeding diversity of the strength of different samples of curare, great caution is neces-

sary in prescribing it. It can be given subcutaneously in doses of $\frac{1}{30}$ to $\frac{1}{20}$ of a grain.

(5). *Picrotoxine*.—Conyba relates the case of a child, æt. 5, who was epileptic from her second year and who had been treated by bromide of potassium without success. Picrotoxine was given in doses, at first, of one milligramme, and afterwards increased until $2\frac{1}{2}$ milligrammes were taken in the day. The attacks gradually diminished, and were replaced by vertigo. The picrotoxine was continued for four years. In 1880 she was considered completely cured.

THE TREATMENT OF PNEUMONIA.

(1). Prof. Picot, of Bordeaux, in his work lately issued, lays great stress on the *role* which alterations of the heart play in pneumonia. He states that all his fatal cases presented some heart change. There was either fatty or pigmentary degeneration, the lesion being generally more advanced in the right than in the left ventricle. He condemns the expectant treatment. Although the tendency of a pneumonia is to a cure, still in great measure the result depends entirely on the resisting power of the patient. In treating a case of pneumonia, we endeavor to do two things: (1) to minimize the effects of the disease, and (2) to increase the resisting power which the patient is possessed with.

In speaking of blood-letting as a means of fulfilling the first indication, and thereby preventing that acute fatty cardiac degeneration which is the great factor in bringing about a fatal issue, Picot says that he always uses this means of lowering the blood-pressure in previously healthy adults. When, however, his patient is either old or young, or affected with any cachexia, he avoids it. He considers that cupping is a valuable therapeutic agent in pneumonia. He relies principally on digitalis, alcohol and quinine. Pneumonia of the apices, he considers, happens only in the debilitated and cachectic, and gives alcohol and quinine freely. If the resolution of the hepatized parts is delayed, he considers blistering a valuable means of promoting it. He only mentions tartar emetic to condemn it. In short, the following are Picot's conclusions:—No expectancy, no tartar emetic, no bleeding, except in robust subjects and in cases of urgent dyspnoea from an over-burdened right heart. In the beginning, digitalis and cupping; later,

alcohol, quinine and digitalis. Blistering if necessary.

The treatment of Pneumonia by alcohol.—Dr. Alix, senior physician to the military hospital at Toulouse, compares the treatment of pneumonia during several years at this hospital. During 1875 and the three following years, there was under treatment in this hospital, 230 cases of pneumonia. Of this number 20 died, being a death rate of 8.9 per 100. The treatment pursued in these cases was the ordinary one, without stimulants. In 1879 and two following years, 75 cases were admitted and treated by alcohol alone, without a fatal result. During the same years there was admitted into other military hospitals, from the same corps d'armée, 195 cases of pneumonia. Of this number 15 died, being a death rate of 7.3 per 100. Alix considers that this difference is in a great measure due to the treatment, for the soldiers were recruited in the same district and were under the same hygienic conditions. In severe cases and double pneumonia, digitalis is given in moderate doses at the commencement of the disease, in addition to the alcohol. The object in giving digitalis at the beginning appears to have been with the view of reducing the temperature, rather than of acting as a tonic to the heart. In considering the value of this treatment, it should be remembered that the patients are men from 20 to 25 years of age, and they are admitted into hospital very early in the disease. It cannot be expected that any civil hospital could present such returns.

The treatment of Pneumonia by the employment of the wet sheet.—Dr. Austin Flint gives the details of four cases of pneumonia successfully treated by the application of cold. The cases were picked ones, the patients being robust and no complications existing. The directions were to employ the wet sheet whenever the axillary temperature exceeded 103° Fahr. "The patients were wrapped in a sheet saturated with water at a temperature of about 80° Fahr., the bed being protected by an india-rubber covering. Sprinkling with water of about the same temperature was repeated every fifteen or twenty minutes. If the patient complained of chilliness, he was covered with a light woolen blanket, which was removed when the chilly sensation disappeared. The patient remained in the sheet until the temperature in the mouth fell to 102° or lower, care being taken to

watch the pulse and other symptoms. When the temperature was reduced, the wet sheet was removed and resumed if the temperature again exceeded 103° Fahr."

Flint in speaking of these cases said, "they certainly show that in cases like those which were selected, the treatment is not hurtful. More than this, they render probable the inference that the disease was controlled and brought speedily to a favorable termination by the treatment. They also go to show that the disease is essentially a fever, and that treatment is to be directed to it as such, and not as a purely local pulmonary affection. It remains to be determined by further observations, how often and to what extent this method of treatment has a curative efficacy. It is also an important object of clinical study, to ascertain the circumstances which render the treatment applicable to cases of pneumonic fever, and on the other hand, the circumstances which may contra-indicate its employment in this disease."

A NEW BLOOD-CORPUSCLE.

According to Bizzozero, if the circulating blood in the small vessels of the mesentery of chloralized rabbits or guinea-pigs is observed under a high power, there will be seen besides the ordinary red and white cells, a third form of corpuscle, which is colorless, round or oval, and from one-half to one-third the size of the red corpuscle. Bizzozero says that it is owing (1) to their want of color and translucency, that they have hitherto escaped the notice of observers. (2) They are less numerous than the red and less visible than the white corpuscle. (3) Owing to the great difficulty of observing the circulating blood in the small vessels of the warm-blooded animals. They can be seen also in freshly-drawn blood, for the most part aggregated around the white corpuscles, or immediately under the cover-glass to which they adhere. They soon become granular and give rise to what is called the granule masses. Through appropriate reagents, their form can be preserved. A solution of salt colored with methyl-violet, has this property. The best method of examining them in the human subject, is to place a drop of the above colored solution over the puncture and mixing the drop of blood thoroughly with it. Owing to their typical forms, it is very unlikely they are derived from the red corpuscles.

The colorless corpuscles contain no ingredients from which they could be derived. After bleeding, and in many diseased conditions, they are increased in number. They play an important part in the formation of thrombi and the coagulation of the blood. They form the principal part of white clots in mammalia. It is probable that they play the *role* in the coagulation of the blood which has been attributed by Mantegazza and Schmidt to the white corpuscles, because the latter are few in number in the circulating blood, and their destruction was never observed by Bizzozero, provided the blood was mixed with a saline solution. Again, the time at which coagulation sets in, corresponds very closely to the time that these new corpuscles undergo degeneration. The fluids which retard or prevent coagulation—as solutions of carbonate of soda and sulphate of magnesia—have the same action in preventing the granular degeneration of these corpuscles. The indifferent solution of salt does not preserve them, but one to which the methyl-violet has been added does.

From this evidence it appears as highly probable that the formation of fibrine takes place, under the direct influence of these corpuscles. To them Bizzozero gives the name of "Blutplättchen."

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ARSENICAL POISONING.

BY A. C. BOWERMAN, M.B., BLOOMFIELD, ONT.*

Mr. President and Gentlemen,—In calling your attention to the subject of "Arsenical Poisoning," and in presenting notes of one or two cases that have fallen under my own observation, it has not been my object to offer any original suggestions of a therapeutic value, or to point out any new diagnostic signs by which this grave condition may be recognized. I desire briefly to notice some of the chief sources through which arsenic is disseminated, to show you that poisoning by this metal is of more frequent occurrence than is suspected; and to urge the advisability of precautionary measures to prevent the distribution of this and every other poisonous material without the necessary warning to the intending purchaser.

In considering the wholesale use to which this agent is put in the arts and manufactures, it is a matter of considerable surprise that its deleterious influences are not more widely recognized and better understood. Perhaps indeed if this subject received the attention which I think its gravity demands, many of those distressing affections which now pass under the head of dyspepsia, catarrhal attacks, general malaise and debility, would be recognized as produced by contact with articles saturated with arsenical pigments, or from breathing an atmosphere laden with microscopical particles of this poison in the form of dust. It has been said that "the special province of the physician is to diagnose disease," and the cases to which I refer are of a nature requiring professional observation for their detection. Once having recognized them and their origin, we can have little difficulty in removing them and arresting the progress of their pernicious influence. You must not understand me to mean that every apparently unaccount-

able ailment is the result of contamination with this noxious metal; but once let us fully realize what arsenic may do, and what it has every opportunity and encouragement for doing, and I am convinced we will scan more closely and study more diligently many perplexing cases that now baffle both our diagnostic and therapeutic skill.

I am well aware that arsenic ranks high as a medicinal agent, and has long been held in good repute and been largely administered by the profession; but I understand it is lately becoming an article almost indispensable to the ladies' toilet. I have the best authority for saying that in the administration of arsenical preparations much depends on the idiosyncrasies of the individual, which differ greatly in different persons. These facts, says Bartholow, should not be forgotten in prescribing strictly medicinal doses. Now if so much care is required on the part of persons educated in the use of this agent, what must be the danger those persons expose themselves to, who prescribe this article for their own indiscriminate use, either internally or as a cosmetic externally, and are ignorant alike of its virtues and its virulence?

It is well known that the wilfully suicidal subject is protected and prevented from inflicting self-injury; the would-be murderer is lodged in safe keeping when his propensities are discovered; yet by a species of passive mental amaurosis on the part of the legislative authorities, the greatest possible encouragement is extended to those who expose the element of disease among our scattered and unsuspecting populace. The truth of this assertion will be plain when I state that the most common channel through which arsenic finds a ready entrance into every household is through the employment of wall-papers, calicoes, and other domestic fabrics, which are very frequently coloured with arsenical pigments. Among other articles which are coloured with this metal, according to the authority of Mr. Hogg, of London, I may mention chintz, silks, muslins, ribbons, stockings, gloves, artificial flowers, American cloths, lamp-shades, candles, playing and trade cards, ornamental boxes and wrappers, children's toys, and even sweetmeats. French chalk has been taken in mistake for prepared chalk, and this same French chalk was shown to contain 40 per cent of arsenic. According to the same authority "the almost universal use of poisonous pigments in the arts and man-

*Read before the Quinte and Cataraqui Medical Association, February 1st, 1882.

ufactures is known to be productive of a two-fold noxious influence; first on the work-people employed in their manufacture, and secondly on a very much larger number of persons who purchase them, and being quite ignorant of their nature, adorn and surround themselves and their homes with the elements of disease. Now if this be true, while we are purifying our walls and writing elaborate treatises on "drainage and ventilation"; while we are spending hundreds upon the construction of elegant and effective traps against sewer-gas, would it not be praiseworthy if our attention were likewise directed toward securing for our atmosphere an equal purity and immunity from poisonous contamination from other not less deleterious channels?

It has been said, and sung too, that "The old Oaken Bucket" of Eliza Cook fame, was no more than a pestilential, germ-producing old relic, more to be condemned than venerated because it impregnated the water with vegetative organisms; yet who ever thinks upon entering an elegantly furnished room that perhaps a more subtle poison permeates every cubic foot of the atmosphere of that apartment than all the bacteria the old bucket ever grew? Mr. Hogg in speaking of the separation and diffusion of arsenic into the air of a room the walls of which are hung with arsenical paper, remarks that "it may be thought that the quantity given off is too small to produce symptoms of poisoning. But this, he adds, is a hasty conclusion to arrive at, for on analysis, Dr. Alfred Taylor found that from each square foot of an arsenical paper examined by him, he was able to produce from 13 to 17 grains of arsenic; and from certain papers printed with a peculiar pigment he obtained as much as fifty-nine per cent of arsenious acid. According to the same authority, arsenic finds its way into almost all papers independent of colour, and in this way "the size used for fixing the pigment on the paper is very prone to decomposition, to prevent which makers introduce arsenic. Mr. Henry Carr, of London, likewise quoting from Dr. Taylor, says: "The pigment of arsenicated wall-papers contains a large proportion of arsenic, and from some of these papers in the unglazed state, the noxious material may be easily scraped or removed by slight friction; thus arsenic is liable to be distributed through the air of a room in a state of fine dust." He further adds that Dr.

Taylor was able to detect the presence of this poisonous dust on books, picture-frames, furniture, and projecting cornices of rooms thus furnished. One gentleman who had his library hung with arsenicated wall-paper suffered from symptoms of arsenical poisoning which came on after he had been occupied in dusting his books and on examination a well-marked quantity of arsenic was found in the dust.

As I stated at the outset, I have no intention of offering any remarks relative to the remedial value of arsenic, on the contrary I shall feel my efforts well repaid if I am able to interest you with some of the abuses of this article. The following symptoms obtain from exposure to poisoning by arsenical dust. The earliest indications of the absorption of this poison, most frequently observed, is an excessive irritation of the whole of the mucous tract and which is generally referred to a catarrhal attack. Improvement following remedial measures are temporary. More frequently as the nasal irritation subsides, a feeling of faintness, headache, and great prostration ensues, and the patient who tries not to think himself very ill is obliged to lay up. In other cases the first symptoms are dyspepsia, stomach-derangements and cramp referred to "bilious attacks." Diarrhoea may supervene upon sleeping in a room newly papered; while headache, sore throat, smarting and running of the eyes will supervene upon awaking from this unrefreshing slumber. Breathing the air of a room after the daily operation of dusting has been performed, produces an aggravated hay-fever, spasmodic asthma and bronchitis. In other instances fainting fits, vomiting, diarrhoea, nervous prostration, skin eruptions, conjunctivitis, dimness of sight, paralysis, etc., follow in regular sequence. All of the above and even many more distressing complaints result from wall-paper poisoning. And Mr. Hogg gives it as his opinion that the danger to public health is quite as great as that arising from sewer-gas or impure drinking water. Possibly no better proof of arsenical poisoning would be desired, than a rapid recovery from the symptoms upon removal of the supposed cause. A few well authenticated cases may suffice to illustrate the frequency of this condition.

"A member of the British Parliament suffered for months with a painful eruption of the feet, which confined him to his couch. Abandoning his

fashionable socks, he quickly recovered. Several Californian miners actually died from wearing boots lined with bright green flannel the colouring matter being Scheele's green. An otherwise healthy tradesman suffered from wearing a bright maroon flannel next his skin. Poisoning has frequently occurred from wearing paper collars, coloured calico shirts, gloves, coat-sleeves and hat-linings. A lady suffered from a painful skin-disease from carrying around a bright yellow purse, whilst another suffered from the dye which came off the black crape dress she was wearing. Several members of a family were made severely ill by the chintz window curtains and bed-furniture of the room they occupied. Another family were poisoned by green venetian blinds. A lady suffered many weeks from a troublesome eruption of the scalp from wearing artificial flowers in her cap. Illness in children has been caused by the cloth lining of their perambulators. Eye diseases have been produced by green shades to the gas lights used in composing rooms. Distemper colours on office walls have injured the health of clerks. The daughter of an official in high life in Vienna, recently wore several times a superb dress of dark green material, trimmed with wreaths of leaves in another and lighter shade of green. During the season the beautiful complexion of the young lady underwent a sudden change, and was ruined by a painful and offensive eruption. After a time her physician, baffled by the symptoms, thought of the dress, had it subjected to a chemical examination and found enough in the colouring to produce all the mischief.

Prof. Roscoe, in his elementary chemistry, says: "All the soluble arsenites are dreadfully poisonous. Alkaline arsenites are soluble in water, and sodium arsenite is used largely in calico printing." This then may be another fruitful source of contact with this metal, both in the wearing and the washing of calicoes which are so widely used. He likewise says: "The employment of arsenical wall-papers is much to be deprecated; still more is the insoluble arsenical green for colouring light cotton fabrics such as gauze, muslin or calico to be condemned, as the colour is merely pasted on with size, and rubs off with the slightest friction." It may be information to some of you to know that confectionery-chocolates, gelatines, etc., are very frequently coloured with arsenite of copper. A mistaken impression prevails that green papers and

fabrics alone are dangerous. The fallacy of this notion has been shown on examination of blue, mauve, red, brown, and even white papers, which were found to be arsenical.

Another class of poisonous dyes has also been added with the introduction of aniline colours, affecting more particularly articles of dress. Arsenic is likewise employed in the manufacture of both aniline and indigo dyes, and is present in such a variety of disguises as to render its detection by the public quite out of the question. Aniline dyes are poisonous of themselves, regardless of the arsenic they may or may not contain. Aside from the list of quoted cases and their relative causes, we are all well aware of the extensive use to which arsenite of copper has lately been put in the extermination of the Colorado beetle, the tomato and the currant worm, to say nothing of the danger run by those who apply this substance either in powder or solution. Are there not a thousand chances in which valuable lives may be carelessly sacrificed through partaking of garden fruits fresh from the bushes, thus diligently medicated? I do not mean to say that gardeners are careful to dust or sprinkle the fruit alone. It is the leaf only that is attacked by the caterpillar, and it is the leaf that is aimed at with the exterminator, but I think you would find it a tedious process to do justice to the leaf and avoid the fruit. Gardeners might do well to suspend notices to their bushes warning the trespassing public that their inviting fruits are both seductive and unsafe; but it must not be forgotten that the incautious and unwary child is the victim most likely to be caught in this unsuspected trap. Perhaps it might be just as wholesome to eat a caterpillar now and then, as to preserve the fruit at the expense of one's own or another's life.

(To be continued.)

LACERATION OF THE PERINEUM AND SPHINCTER ANI COMPLICATED BY A RECTO-VAGINAL FISTULA.

BY J. E. BROUSE, M.D., BROCKVILLE, ONT.

On the 15th of November last I received a note from Dr. Hanna of Lansdown, asking me if I would go there and operate on a lady, who lived three miles from the village, for restoration of a completely ruptured perineum. He stated that she had been confined only six weeks previous of her

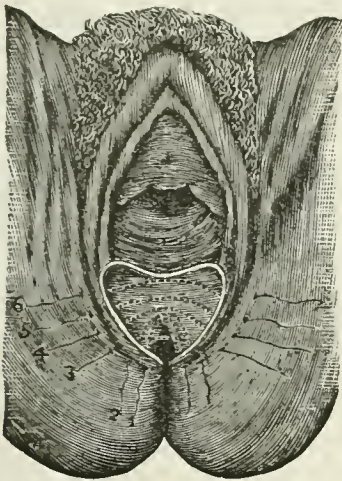
second child, and that the accident occurred under the care of another physician nearly three years before in her first labor. Without obtaining any more particulars I agreed with her friends to operate, and went to see her on the 26th of November, prepared to do so if there was a reasonable prospect of success, and the woman properly prepared. But when I came to examine the state of the parts and saw the extent of the lesion, I regretted my promise, and were it not for the anxiety of the woman to obtain relief, twice the fee agreed on would not have induced me to touch the case, as I deemed success very problematical. During the twenty-one years of my professional life it has been my lot to see many cases of torn perineum, not only in private practice, but in the New York State Hospital for women, where I saw several bad cases operated on (not always successfully) but never had I met with one in which the original injury was so extensive as in the one I am about to describe. The history is briefly this: June 22nd, 1878, pains began at 6 a.m. very light until 1 p.m. when they became more regular and strong. Membranes ruptured at 2 p.m., from that time until 7 the pains were quite strong. Between 7 and 8 they were feeble with long intervals. The physician in attendance applied the forceps and the child was born in a few minutes. The next day the doctor put in three sutures leaving them in fifteen days, at the end of which time no union had occurred. Ever since then she has had no control of the bowel, both flatus and feces passing in spite of her every effort. The feces also pass into the vagina, obliging her to wash out the part frequently. Although only 23 years old her life has become a very burden, and rather than continue an object of disgust to herself, she is willing to submit to any operation that will afford the slightest prospect of relief.

Placing her on a table in good position before the window, I saw a widely gaping cavity into which could be put an ordinary sized goose egg, without stretching the parts in the least. The perineum was entirely wiped out of existence, the sphincter ani torn through and lying at the lower or posterior margin of the anus (which was open) with its inner fibres contracted and the ends marked by a distinct pit on either side. A band of skin and mucous membrane one-eighth of an inch in diameter had united in front of the anus thus

converting what had originally been a rent into a recto-vaginal fistula of over an inch in extent. On passing my left index finger into the rectum and lifting up the posterior vaginal wall, a cicatrix, at the junction of the left lateral with the posterior wall, fully three inches long and extending nearly into the cul de sac, was discovered. The original rent had been through both the vaginal and rectal tissues and in uniting had bound the parts so tightly down that it was almost impossible to raise them sufficiently to get a good view. In order to have the patient in as good a condition as practicable I deferred the operation for ten days, in the meantime ordering such diet as would, in the process of digestion, leave the least debris, and giving instruction to have her bowels freely opened by cathartic pills each day until the ninth when an opiate was to be given so as to lock them up.

On the 6th of December, hearing from Dr. Hanna that the patient was ready, I went up, accompanied by my friend Dr. Vaux, who kindly offered to assist, and operated. I first washed out the rectum with carbolized warm water, but the opiate not having had the desired effect nearly an hour was consumed before the water returned clear. Dr. Lane of Mallorytown gave the anæsthetic, using Squibbs ether, while Drs. Hanna and Vaux kept the parts on the stretch and did the sponging. First marking the points on the posterior wall of the vagina and on either labium to which the denudation was to extend, the operation was begun by picking up the skin with a tenaculum at the left extremity of the spincter on a line with the posterior margin of the anus and freshening the end of the muscle with the scissors. Then a narrow strip of mucous membrane was denuded completely around the fistula (which was converted into a rent by dividing the narrow band at its lower margin) and down the right side to the other extremity of the muscle. In this manner strip after strip of mucous membrane was removed from the side and posterior walls of the vagina, the greatest difficulty being experienced in getting at the parts bound down by the cicatrix, and it was only by exercising patience that it could be accomplished. To add to the trouble the bowels, notwithstanding the opiate, kept moving every eight or ten minutes during the whole time, occasioning a great deal of delay in cleansing. Having reached the points marking the limit of denudation, the first suture

was put in by entering an ordinary two inch needle, threaded with silk to which a silver wire was attached, below the sphincter close to the left side of the anus, and carrying it up in the cellular tissue to a point one-fourth of an inch above the limit of the rent, then around it and down the right side to a point exactly opposite that of entrance. The second suture was entered on the same plane, catching the end of the muscle and following a course parallel to the first and one half inch higher up. The third passed directly across the upper margin of the anus and under the first two so as the more effectually to bind the muscle in its place, when brought into position. The fourth, fifth and sixth sutures were entered about half an inch from the edge of the left labium, passed back through the tissue of the lateral wall, then through the tissue of posterior wall in front of the rectum and out through the right wall to a point opposite that of entrance. The sutures were about half an inch apart.



By taking an end of wire No. 1 in either hand and pulling, at the same time pushing up the sphincter with the index fingers, the muscle was made to encircle the anus and was secured by a couple of twists of the wire. Suture No. 2 brought the outer fibres of the severed muscle in contact. No. 3 was put in at the suggestion of Dr. Emmet, to whom I had shown a rough sketch of the parts when in New York the previous week, and I have no doubt that it added materially to the success of the operation by effectually keeping the muscle in position. Nos. 4, 5 and 6 brought the sides and posterior wall in contact, thus completely restoring the perineum. In twisting the sutures care was taken to

do no more than bring the parts in contact so as to lessen the danger of cutting through or producing strangulation when swelling occurred. The sutures were left three inches long and secured together by a piece of rubber tubing over the ends and wrapped with wire. All blood stains were now washed away, the thighs tied together, a soft pad being placed between the knees, and the patient put to bed. The operation lasted one hour and thirty minutes, but, had it not been for the trouble given by the old cicatrix and the continued action of the bowels, it would have been done in less than half the time. An opiate was given to confine the bowels, and instructions left for a daily dose until the sixth day when an enema of warm oil was to be administered. Dr. Hanna in the meantime attending to the bladder and washing out the vagina. The same diet was continued as before the operation. The bowels, unmanageable all through, operated on the night of the fifth day, before Dr. Hanna gave the enema, and caused great pain, but did no further harm. Dec. 14th I removed the sutures and found the parts united. She was kept in bed with her thighs tied for ten days longer, when she was allowed to get up. I have not seen her since removing the stitches, but the following extracts from letters by Dr. Hanna will show her condition :

LANSDOWN, Dec. 13th, 1881.

DEAR DOCTOR,—I drove up to see Mrs. R— Friday the 16th, and after a careful examination of the parts I am of the opinion that there is not union of the sphincter ani. I hope I am mistaken, but my opinion was corroborated by yesterday's examination. There is first class union of the perineum proper, and by a digital examination in the vagina, it (the perineum) seems to be perfect in extent and symmetry. However she claims to have good control of the bowel now, and as the passage of the fæces into the vagina was her chief trouble, which will now be obviated, I have no doubt but she will feel the operation a success even if my idea be correct.

Yours truly,

F. HANNA.

In my reply to Dr. Hanna I said that he must be mistaken, for if there was no union of the sphincter there could be no control over the bowel. January 4th, 1882, Dr. Hanna wrote as follows : "In reference to Mrs. R— I am pleased to inform

you that the condition is not as I stated in my former letter. There is still a slight deficiency in the sphincter, but she says she has much better control over the bowels than formerly. When I examined her before, the defect seemed to be about $\frac{3}{4}$ of an inch, but since the swelling has disappeared the defect is only trifling and quite superficial. I think you can safely report the case as a genuine success. The family and she are thoroughly satisfied.

Yours truly, F. HANNA."

Thus has a young life been changed from a state of great misery to one of enjoyment by an operation, which, at the outset, seemed almost hopeless. It is such a success as this, occurring occasionally in the career of a medical man, that helps to cheer him when, only too often, cast down and discouraged by his failures and the unkind criticisms of those who make no allowance for any one but themselves.

Correspondence.

ELECTRICITY IN THE TREATMENT OF SPASMODIC DISEASES.

To the Editor of the CANADA LANCET.

SIR,—In a letter in the February number of the LANCET, Dr. Thos. W. Poole denies that electricity is a curative agent in spasmodic diseases, and gives, as ample evidence of the correctness of this position, a single quotation from Dr. J. Russell Reynolds' lectures on the "Clinical uses of Electricity." If Dr. Poole had continued his quotation to the end of the same paragraph, some hint would have been given of Dr. Reynolds' real estimate of the value of electricity in the treatment of spasmodic diseases, and a reply from me would have been almost superfluous. As, however, many of your readers may not possess a copy of Dr. Reynolds' admirable lectures, simple justice demands that his position on this subject should be fairly stated.

Under the heading of "General Remarks on the Clinical use of Electricity," Dr. Reynolds says, on p. 11. "There are other diseases which you cannot be said to cure, but which you may relieve by electricity. By its application you may, in many instances, again and again relieve pain; you may

in like manner relieve spasm; or you may slowly diminish and even ultimately remove paralysis." Again, on page 17, he says, "This (the continuous galvanic current) will do the following things: it will relieve spasm of certain kinds; it will relieve pain of certain kinds. A person may have a particular kind of headache; you pass a continuous current * * and in a few seconds the pain is gone. It will also remove some forms of tremor and of spasm."

Under the heading of "Clinical effects of Electricity on nerve and muscle," he says, on page 23 and page 24, "Electricity may put a nerve into action." * * "Its other effect is to diminish the activity of a nerve, when that activity is normal, or in excess." * * "To the electrification of muscles, similar statements will apply." * * "When, on the other hand, muscles are contracting preternaturally, exhibiting spasm, either tonic or clonic, you may reduce this action by the continuous current," etc.

Under the heading of "Therapeutical uses of Electricity," he says, on pages 62 and 63, "Secondly, electricity may reduce, or even annihilate, for a time, the action of a nerve or muscle." * * "It you have pain, over-action, or spasm—whether tonic or clonic—you may so use electricity as to diminish those conditions and bring nerve and muscle to their normal states." On page 64 he says, "There are * * hardness of a limb, * * actual rigidity, * * tremulousness of muscles, and lastly, clonic spasm." * * "These are all signs of an over-action, that may sometimes be reduced by electricity. Again, on page 66, he says, "Over-activity of a muscle or nerve, or vessel, may be reduced by the application of the continuous galvanic current." * * "Another form of electricity—faradization—may also be employed to reduce over-activity. If you find, for example, a man suffering from torticollis—spasmodic wry-neck—the sterno-cleido-mastoid and other muscles of one side acting most violently, and turning the head over to the opposite shoulder, you may stop that by passing through the sterno-cleido-mastoid muscle a galvanic current." "Another way in which you may reduce the over-action of a muscle, is by faradizing the antagonistic muscle. Suppose the flexors of the arm are contracted, as in some cases of 'late rigidity,' and you find it difficult to get the fingers open,—the best mode of overcoming that condition is to apply faradization, not to the mus-

cles affected, but to the other muscles, the extensors, so as to antagonize them. Again, in the case of torticollis, where a man's head goes jolting over to one side, you can reduce the over-action by putting the antagonistic muscle into action by faradization, and so pulling the head round into its proper position." "There is another point to which I will now call your attention (pages 79-81), and that is the condition of 'rigidity' in a limb in cerebral paralysis. It is common enough in old cases, and sometimes is met with in those that are quite recent. In the latter case I advise you not to use electricity, for you may do harm; in 'late rigidity' you may employ it without fear and with considerable advantage." * * "Sometimes in an early stage, a few applications of electricity will cure the rigidity and not only remove the tendency to cramp, but even bring back the proper contractility of the limb." * * "You may often call into action the extensors of a much weakened hand, by applying a moderate faradization with well wetted sponges to the back of the forearm; * * faradization is much better for this purpose than the battery (constant) current, although the latter may be used to assist the former by applying it, in a continuous form, to the rigid and over-acting muscles." * "You faradize extensors, and galvanize the flexors of the hand and fingers; and you may, if the rigidity has extended higher, adopt a similar plan with regard to the muscles of the forearm or the arm."

It is quite true that up to the date of the publication of these Clinical Lectures (1873), Dr. Reynolds had not been successful with electricity, in the treatment of torticollis, writer's cramp and hysteric spasm. He admits, however, that in this respect he has not been as successful as others; he says (page 102), "Others have been more successful, and I trust your experience will resemble theirs rather than my own. Since the first edition of these Lectures was published, my friend, Dr. Geo. V. Poore, has treated cases of writer's cramp and scrivener's palsy successfully, by a process peculiar to himself. Dr. Poore has found some muscles defective in irritability, and others over-irritable. The plan which he has adopted has been highly ingenious and useful, viz., the faradization of weakened muscles, and the application of a constant current to muscles disposed to spasm, together with the employment of rhythmic move-

ments of the limb, at the time of the latter application. (See the *Practitioner* for 1872-3). From my own knowledge of some cases which Dr. Poore has thus treated, I can speak with much confidence and hope as to the future of many forms of this disease, which had previously proved so intractable as to lead to the general expressions which I have used on the preceding page."

So much for the views of Dr. Reynolds in 1873. Whether they can be adduced as "proof" of the failure of electricity to relieve spasmodic diseases, as Dr. Poole would have us believe, or whether they rather favor Dr. Bartholow's statement, that "there is nothing more certain than the power of electricity to relieve spasm," I leave your readers to decide.

In addition to the above, and in view of the great practical importance of this question, it may be well to record the views of other authorities of recognized standing. A few brief quotations from Meyer,¹ Althaus,² Tibbitts,³ and Rockwell,⁴ must suffice however.

(Torticollis). "It is developed either in consequence of an asthenia (paralysis, atrophy) of the antagonists, * * in which case it is cured by the induced current being directed to the antagonists (see case 70); or it is caused, according to Remak, by a myelitis lateralis of the opposite side, * * and then it is treated successfully by removing the myelitis, through the constant current."—Meyer, page 360. "Electricity of high tension (the constant current) as a counter-irritant and induction currents methodically applied to the antagonists of the suffering muscles, have effected amelioration or cure."—Althaus, page 575. "From this treatment I have had good results in several cases of spasmodic wry-neck (torticollis); * * in these cases it is always well to combine with the charge (constant current) energetic faradization of the antagonists of the contracting muscles; and the same treatment may be followed with advantage in writer's cramp and analogous affections."—

1. Electricity in its Relation to Practical Medicine, by Dr. Moritz Meyer. Translated by Wm. A. Hammond, M.D., 1872.
2. A Treatise on Medical Electricity, by Julius Althaus, M.D., M.R.C.P. Lond. American edition, 1873.
3. A Handbook of Medical Electricity, by Herbert Tibbitts, M.D., L.R.C.P. Lond. American edition, 1873.
4. Lectures on Electricity, by A. D. Rockwell, A.M., M.D., 1879.

Tibbitts, page 143. "M. Rosenthal cured with the constant current the following case (of torticollis): * * the passing of a constant current through the affected muscles caused immediately a freer motion of the head."—Meyer, page 372. "In its earlier stages, however, it may be cured by electrical treatment alone."—Rockwell, page 60.

(Writer's Cramp). "That form which depends upon an asthenia of the extensor muscles is best removed through their faradization, while the neuritis is cured by the use of the constant current."—Meyer, page 365. "As generally all other means fail to effect a cure in this troublesome complaint, I cannot too strongly recommend practitioners to resort at once to galvanization."—Althaus, page 575. "Rest is here imperative. If in the earlier stages this is taken, and the proper electrical treatment administered, the symptoms in many cases yield readily enough."—Rockwell, page 72.

Yours, etc.,

A. M. ROSEBRUGH, M.D.

Toronto, Feb. 17, '82.

ADVICE TO YOUNG PRACTITIONERS.

To the Editor of the CANADA LANCET.

SIR,—The following letter of advice from an old practitioner to the prospective graduate in medicine may interest some of the readers of the LANCET.

Yours, etc., J. W. H.

DEAR PUPIL,—It is, and has always seemed, very strange that there is not instituted a special series of lectures for the senior students of the medical schools—such lectures not to be so much directed to any particular theme, but to a consideration of ethics, in other words, the relationship of medical men to each other and to the public—to a consideration of the young practitioner's duties as a medical man and as a citizen. For example: In the first instance he might be instructed in the manner of charging for his services, and in collecting the same,—how to appear personally, what to assume in his daily life, what company he should associate with—in fact, what would entitle him to be considered a member of our most honorable fraternity, and what to avoid if he wishes not to disgrace it and himself. The reader of this might say that any one knows enough for that. I partly admit it; but you will agree with me when

I say that lectures directed to the subject just before the young medico is given the long sought for honors of his degree, would be the means of directing him aright at the outset, and give a more uniform degree of dignity, than if it were left for his manhood to adopt. I also deem it the duty of our colleges to instruct students in regard to such medicines, surgical instruments and other accessories as they may need in establishing themselves in practice. I can look back some thirteen years to my commencement and see wherein I made some expenses uncalled for, associated with those whose influence and society were derogatory to myself and profession, observing not that gentlemanly seclusion which, to-day, I fully acknowledge as salutary, to a considerable extent, in every profession. As to expenses, I might refer to the needless one of having one's professional card in a newspaper. It has always seemed to me unprofessional and decidedly useless, and yet I have actually thrown—yes, tossed to the winds—some forty or fifty dollars in such advertising. I am pleased to notice that the practice of advertising is getting unpopular among the older and better class of physicians. Young practitioner, put your foot on this evil. I have also been harrassed (this word does not half express my meaning) by the travelling literary gentlemen and drug agents—the former to draw my attention to some late medical work, journal, instrument or appliance; the latter to solicit an order for some new pharmaceutical preparations. The book agent is a bore. Recently a member of this order entered my office, threw down from his arms a great roll, which, when opened, proved to be an atlas of anatomy. After the grand opening and commencement of his stereotyped appeal, I directed his attention to a combination of letters—large type, in frame—which for those of his order I keep constantly in place—no. Reader, just adopt my simple plan. Your course will have furnished you with what works you need in practice. The United States Dispensatory is a convenient work, and from it you can actually learn more of medicine than any work I know of. I would advise you to subscribe for "Wood's Medical Library," published yearly; yet in so doing, I must admit that two-thirds of the works are useful as reference only, and make your library larger. I maintain that, although the "library" is cheap, if the money for it was ex

pended for works one actually thinks, after due consideration, that he needs, it were better. Now, as to drug agents. Be careful of your orders, keep a copy for yourself, and watch the prices. You will find it also to your interest to get quotations from other drug houses. For several years I traded with a firm, and was kept constantly on my guard to keep even with them. If I had not carefully preserved my receipts, I find on looking over my books that I would have lost some seventy dollars. I was persuaded to give them another order—my last; I preserved a copy of it, and sent it to a firm not far distant to get their prices, and I was astonished to find on its return that by dealing with them I could have had the same goods for six dollars less. In purchasing drugs, I would suggest the following: Buy of the nearest wholesale druggist, keep receipts and a copy of your orders carefully; do not buy fluid extracts—make them yourself, for you can purchase for a few dollars the necessary apparatus to manufacture them. Fluid extracts are expensive to purchase and do not last longer than tinctures. Keep posted in regard to the drug market, but especially on staple drugs, and purchase a quantity when low. I have several other subjects to which I wish to draw your attention, and will write them up soon.

Yours, etc., OLD PRACTITIONER.

MEMORIAL TO THE LATE DR. ROLPH.

To the Editor of the CANADA LANCET.

SIR,—Your remarks in the February number of the CANADA LANCET anent a "Memorial to the late Dr. Rolph," were highly opportune and renewed in me a determination to ask the profession, through your journal, if something could not be done to commemorate the name of this great man. I have often thought it a lack of kindness (to say the least) on the part of the profession and especially the graduates of his school of medicine, to have allowed the matter to lay so long unattended to.

We certainly owe a great deal to the energy, determination, ability and scholarly attainments of the late Dr. Rolph, whose well stored mind and willing tongue were ever ready to advance the best interests of his chosen profession. But few of his confrères can be referred to who did so

much for its interest and advancement under so many difficulties and obstacles, and I think that we who have lived to see his great work prosper should commemorate his name as a mark of appreciation of his great labors.

What particular form the memorial should take will be a subject for future consideration by the profession. The first thing, perhaps, to be determined will be, What amount of money can be raised for this purpose? The form of the memorial can be gauged by the amount to be expended. A tablet, bust, or oil painting in the College of Physicians and Surgeons of Ontario would be very suitable, but I think a more public place could be found, where not only the visitors to the Hall would see it, but the public at large. Would not the Park or City Square be a better place? These are merely suggestions.

If the former pupils and friends of the late Dr. Rolph are prepared to move in this matter, I would respectfully suggest that a committee be appointed, and that the influence of the daily papers be also secured in behalf of the undertaking. In that event I think there would be little difficulty in raising a sufficient amount to meet the requirements. There are many outside of the profession who have a kindly recollection of his amiable qualities and who would be pleased to show it by contributions, but who, if only the columns of medical journals were devoted to the subject, might not become aware of the movement.

I am also aware that the subject of this letter had his faults and his enemies, but who among us has none? Let us, however, forget the faults and remember the good qualities, and praise the noble traits, for above all his faults his great abilities soared pre-eminently aloft. Hoping that these few fragmentary remarks may be of use in opening up the way to further action in the matter, and that more able brethren may take hold with us in our feeble efforts to do honor to the memory of this great man.

I remain, yours, etc.,

D. L. WALMSLEY.

Elmira, Feb. 20, '82.

BELLEVUE HOSPITAL Training School for Nurses gave degrees January 17th, to twenty-one nurses.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The annual meeting of the Huron Medical Association was held in Clinton on Tuesday, Jan. 10th, Dr. Sloan, of Blyth, President, in the chair.

The following members were present: Drs. Sloan, Holmes, Worthington, Hyndman, Bethune, Williams, Graham, Young, Taylor, Duncan, Mackid, Hurlburt, and Stewart.

Dr. W. J. R. Holmes, of Brussels, was appointed President, and Dr. Hurlburt, of Brucefield, Vice-President, for the ensuing year. Dr. Stewart, of Brucefield, was re-elected Secretary.

The Association decided to subscribe for one copy of the *Index Medicus*.

Dr. Mackid, of Lucknow, exhibited a married man, aged 43, farmer, who has been complaining for the last three years of severe periodical pains in various parts of his body. These pains, which are situated in his arms and legs, often last for hours. He also complains of pains of a "lightning-like" character, confined to the arms for the most part. He says his sight is dim, and often, after severe exertion, he is blind, and sees things double. He has lost all sexual desire. He is seldom able to retain his urine an hour. His bowels are very irregular. He says he is apt to stumble in the dark; but there is no evidence of ataxia when his eyes are shut. Patellar reflex is normal. There is no paralysis of motion or disorder of sensation in the muscles of any of the extremities.

Dr. Duncan, of Seaforth, showed a very well marked example of *Jacksonian Epilepsy*. The patient is a boy, four and a half years of age, a twin, born at seven months. The premature birth was owing to an injury the mother sustained in being thrown out of a sleigh. The general health is good. Had whooping cough. There has been a purulent discharge from the right ear ever since the child was two months old.

When he was nine months old, the mother noticed that while nursing he would suddenly and without apparent cause, stretch himself back and leave the breast for a short time. From the ninth to the twelfth month there was frequently recurring attacks of ordinary general convulsions. These attacks have, however, completely passed

away. The boy is larger and better developed than his twin brother. His mind is bright and active. His speech is not very distinct, however. The first unilateral convulsion occurred in June, 1878. They have recurred frequently since that time; sometimes there will be as many as seven in one day. The individual fits occur as follows: The first thing noticed is generally that the child is in unusually high spirits; he is restless and excited and talks strangely. About twenty minutes before the convulsive movement begins, he loses the power of the left side. The convulsions commence, sometimes in the fingers, sometimes in the toes—always in the left extremities, however. If they commence in the fingers, they travel up the arm and down the leg; if in the leg, then up this limb and down the arm. The convulsions, after lasting a few minutes, cease; after a short pause, they are repeated, and again cease; and so on for four or five hours. They never become general. The tongue is protruded to the left and the eyes are turned in the same direction during the convulsions. The left side of the face and forehead get dark during the fit. After the convulsions have completely ceased, the child falls into a deep sleep, from which he awakens with completely paralysed left extremities. The paralysis passes away in from twelve to twenty-four hours. Consciousness does not appear to be completely lost during the attacks. Bromide of potassium has appeared to have prevented many convulsions which otherwise would have occurred. The above case differs from reported cases in the fact of paralysis preceding as well as following the convulsions.

How to explain the paralysis which occurs before the cortical centres discharge themselves and thereby become exhausted, appears to be difficult.

Dr. Taylor, of Goderich, shewed the following cases:

(1). Pseudo-hypertrophic muscular paralysis.

The patient is a boy, aged 16, with a good family and personal history, and who presents the characteristic symptoms of this disease in a pronounced degree. His mother states that he always had a difficulty in walking, and was constantly falling if travelling over uneven ground. His playmates styled him "Stiff-legs." The calves are three inches greater in circumference than the upper part of the thighs. The arms are an inch larger than the forearms. There is general muscu-

lar weaknrs Patellar reflex absent. The lordosis, and peculiar method of arising from the prone position characteristic of this disease are well marked in this case.

(2). Left Hemiplegia from destruction of a portion of the right cortical region of the brain—Epilepsy.

The patient, a female, aged 23, when five years of age sustained a fracture of the right side of the skull by a branch of a tree falling on her. There was loss of cerebral substance at the time. Her left arm and leg have been paralysed ever since—the arm being completely so, the leg only partially. The patellar reflex of the paralysed limb is greatly exaggerated. The left arm is atrophied and contracted. There is loss of bone to the extent of about $2 \times 1\frac{1}{2}$ inches over the right side of the skull, principally in the region known as the lower antero-parietal area, and which corresponds to the convolutions bordering the fissure of Rolando. Three years ago this patient had her first epileptic fit; since, the convulsions have recurred two or three times weekly. While she was being examined she had a fit. The convulsions, which were general, were of a tonic character for about half a minute; this was followed by three or four general clonic convulsions. Consciousness was lost. The contracture of the paralysed arm (left) was relaxed, and the eyes were strongly to the left during the fit. She has no aura preceding any of her fits. The least mental excitement is apt to bring on a paroxysm.

(3). A case of Necrosis of the Mastoid Portion of the Temporal.

This patient was a boy, seven years of age. About four years ago he had a purulent discharge from his right ear, which was followed by swelling behind the ear. A free incision was made into this swelling, and several small pieces of dead bone removed. The wound healed up quickly, and remained so until a few months ago. At present there is a copious purulent discharge from both the external auditory canal and the mastoid bone. The mastoid disease is supposed to have been caused by a plug of cotton wool which had remained in the ear for a period of fifteen months.

Dr. Worthington, of Clinton, showed a case of Paraplegia, being probably an example of the so-called Hysterical Paraplegia.

The patient is a married woman, 32 years of age. She has four children. During her first pregnancy,

11 years ago, she says she was unable to walk; and for a period of nine months following it, she maintains that she lost motion and sensation of the lower extremities. She recovered completely, and remained well up to her second pregnancy, when she complained of "lightning-like pains" in her lower extremities. She says that she again lost motion and sensation following the second pregnancy. After her third pregnancy she remained well. Two months after her fourth pregnancy (Nov., 1879), she "caught a cold," which was followed shortly afterwards by loss of power in the lower extremities; and from this state she has not yet recovered.

Present state.—There is considerable loss of power in both lower limbs. It is with the greatest difficulty that she can move about when supported by two persons; unassisted locomotion is not possible. Sensation is exalted in the paralyzed parts. The legs are oedematous. She has lost power over both rectal and vesical sphincters. The patellar reflex in both limbs is greatly exaggerated; ankle-clonus present. She complains of pains darting around the chest and abdomen. Vision good. There is no spinal tenderness, or unevenness of the spinous processes.

Dr. Sloan, of Blyth, showed a case of Anæmia in a man 23 years of age.

Eighteen months ago this patient had jaundice, lasting five days. Four months ago he commenced to lose flesh and color. There is no enlargement of the liver, spleen, or any of the lymphatic glands. Blood is normal; pulse, 38 when lying, sitting 48. There are no changes to be detected in either the thoracic or abdominal viscera. The temperature is not increased. The administration of iron has not been of any benefit.

Dr. Hyndman, of Exeter, showed a very well marked example of Aneurism of the left femoral artery, situated at the apex of Scarpa's triangle.

The patient is a man 23 years of age, with a good family and personal history. Three years ago he was accidentally shot; the ball (from a large pistol) passed into the left thigh, about the centre of its internal surface, taking a course apparently under the skin and fascia outwards to the external surface of the thigh, where it still lies imbedded. Although there was no hemorrhage, the amount of shock was very great. The wound healed in a week, and it was then noticed that there was abnormal pulsation about the apex of Scarpa's triangle. Since this period he has been constantly attending to his duties as a clerk in a dry goods store. At present there is a large expansile pulsating tumor occupying the thigh, about the middle of its anterior and internal surfaces. It has a long diameter of four inches, and a short one (transverse) of two and a half inches. There is a distinct bruit to be heard and thrill to be felt over the tumor. Pressure on the femoral artery above arrests all pulsa-

tion, etc., in the swelling. There is no œdema and but little pain in the affected limb.

Drs. Stewart and Hurlburt, of Brucefield, showed a boy, aged three, who has lost in a great measure the co-ordinating power of the muscles of his lower extremities, and, in a slighter degree, those of the upper extremities also. He is unable to walk unless assisted. He walks much worse in the dark or with his eyes shut. There is no loss of motion or sensation. The patellar reflex is absent in both legs. The general health has not suffered any. The trouble came on gradually about two months ago. Vision is good. He has complete control over both bladder and rectum. He has had an offensive purulent discharge from the right ear for a year.

Dr. W. J. R. Holmes, of Brussels, showed a man aged 50, who has paralysis (almost complete) of both median and radial nerves in the hands. Full notes of this case will be given later.

Dr. Graham, of Brussels, showed a specimen under the microscope of the blood from a case of pernicious anæmia.

Selected Articles.

PHYSICAL DIAGNOSIS, AND THE EMPLOYMENT OF ASPIRATION IN CASES OF PERFORATING PERITONITIS.

BY AUSTIN FLINT, M.D.

Of the various causes of acute diffuse peritonitis, traumatic and puerperal cases being excluded, the most frequent is perforation of the alimentary canal. It is highly important to recognize this condition at the bedside, in individual cases for several reasons. One reason relates to the prognosis. The prognosis is extremely unfavourable if there be intestinal or gastric perforation. Another reason has reference to the use of opium in the treatment. In all cases of acute peritonitis, opium is the "sheet anchor" in the treatment; but there is added a special object in the use of opium if perforation exist. Recovery is possible only by such a degree of induced arrest of peristaltic movements as will allow adhesion to take place at the point of perforation. The practice of the future may furnish another reason. It may be that laparotomy will be found to be a life-saving operation in some cases. Opening the abdominal cavity, closing the perforation by proper surgical means, and washing out all irritating matters, it is not highly improbable will be a method of treatment sanctioned by its successful employment.

Correlatively it is of importance to be able to exclude perforation, at the bedside, in cases of acute peritonitis. One object of this paper is to invite attention to the proof against perforation

afforded by a physical sign, namely, hepatic flatness on percussion. The exclusion of this cause is a ground for a favorable prognosis; it is to be considered in the use of opium in the treatment, and, at a future time, perhaps in deciding upon laparotomy.

Under normal conditions, flatness on percussion extends from about the sixth rib on the mammary line to the site of the lower border of the liver, that is to the level of the false ribs. In cases of perforation of the stomach or of the intestine, gas in greater or less quantity escapes into the peritoneal cavity. The exceptions, if there be any, must be extremely rare. Gas within the peritoneal cavity, the patient recumbent on the back, will separate the anterior surface of the liver from the thoracic wall. This is probably true without exception, provided there be not adhesion of the entire anterior surface of the liver as a result of peritonitis, and adhesion sufficient to prevent the entrance of gas between the liver and chest-wall is rare. The presence of gas between the anterior surface of the liver and chest-wall gives rise to tympanitic resonance on percussion. I assume that in cases of peritonitis with perforation, the normal hepatic flatness is always supplanted by tympanitic resonance. This statement is shown by experiments on the cadaver and by clinical observations.

The points which I make are these:—If perforation be the cause of the peritonitis, there is more or less gas in the peritoneal cavity; a stratum of gas will then separate the liver and the chest-wall, giving rise to tympanitic resonance on percussion, and, hence, if there be any persistence of the normal hepatic flatness, perforation as the cause of the peritonitis may be excluded.

It is only within a short time that my attention has been specially directed to this proof against intestinal or gastric perforation in cases of peritonitis. During this time, however, the following cases under my observation have exemplified its practical application.

In the case of a middle-aged man, seen with Prof. Erskine Mason, of New York, and Dr. Furnan, of Tarrytown, the history and symptoms pointed to perforation of the appendix vermiformis of the cæcum. The pain originated in the right iliac fossa; resistance to pressure was felt in this situation, and the abdomen was notably tympanitic. Moreover, the general symptoms denoted so much gravity that a fatal termination was considered highly probable. Hepatic flatness on percussion, however, was always found, and the recovery of the patient may be considered as rendering it almost, if not quite, certain that there was not intestinal perforation.

A woman of middle age, seen by me in consultation with Dr. Lewis and Dr. Hutchison, of Brooklyn, presented the symptoms of acute diffuse

peritonitis, with enormous tympanitic distention of the abdomen. Hepatic flatness was well marked, and on this fact perforation of the alimentary canal was excluded. Death took place within twelve hours after my visit. The autopsy showed the recent passage of gall-stones through an ulcerated passage in the duodenum. Two gall-stones were found in the small intestine. There was no gas in the peritoneal cavity.

In the case of a young woman, a patient of Dr. Burrall, of New York, acute diffuse peritonitis was developed in the course of typhoid fever. There was moderate tympanites in this case. Hepatic flatness was found on percussion. The case ended fatally, and there was no autopsy. That intestinal perforation had not taken place, was a fair inference, irrespective of the hepatic flatness, from the absence of the gravity of symptoms which perforation occasions, and from the fact that death did not take place for at least a week after the occurrence of the peritonitis.

So far as these cases go, they show that hepatic flatness on percussion is proof against perforation of the alimentary canal as the cause of an existing acute peritonitis.

A larger collection of cases is desirable, and a motive in submitting a paper at the present time is to interest others in testing the value of this physical proof.

Assuming that hepatic flatness on percussion is proof against perforation of the alimentary canal in cases of peritonitis, it cannot be assumed that tympanitic resonance over the hepatic region is always proof of perforation. The possibility of the colon being pressed upwards, so as to lie between the anterior surface of the liver and the chest-wall, has been demonstrated. But this occurrence is not necessary in order to explain hepatic tympanitic resonance on percussion. It happens not very infrequently that when the transverse colon is much distended with gas, tympanitic resonance is conducted upwards, so as to meet the pulmonary resonance. This conduction upwards of tympanitic resonance from the colon renders the evidence afforded by percussion of the site of the lower margin of the liver very unreliable. If reliance were placed upon percussion, it would be necessary sometimes to conclude that the liver is wanting in its normal situation. This conclusion was actually reached in a hospital case under my observation. The patient had cirrhosis of the liver, with some hydro-peritoneum, and a greatly enlarged spleen. It was reported to me as a case of transposed abdominal viscera, the liver being situated on the left side; and the tympanitic resonance in this case extended upwards to the upper margin of the liver, where it became merged into the pulmonary resonance.

It is not an uncommon error to infer diminution of the size of the liver by measuring, on the

mammary line, the distance between pulmonary and tympanitic resonance. On the other hand, percussion is not to be relied upon for determining enlargement of the liver, for the reason that the upper boundary of the tympanitic resonance is no criterion for locating the lower margin of the organ. Here, however, we have a resource against the unreliability of percussion, namely, palpation. The sense of resistance to finger-pressure may be relied upon in ascertaining how far the liver extends below the false ribs, and the pulmonary resonance on percussion is reliable as indicating its upper boundary.

In order to show that the presence of air in the peritoneal cavity causes hepatic flatness to disappear, and gives rise to tympanitic resonance over the liver, the following experiment on the cadaver was made by Dr. Stone, House Physician of the Third Medical Division, Bellevue Hospital, at my request, and in my presence. It is proper to state that the experiment was suggested by Dr. Corwin, senior assistant of the division.

The body of a man, six hours after death, presented considerable tympanitic distention of the abdomen. Hepatic flatness was limited on the mammary line to a space about an inch in its vertical diameter. Air was injected into the peritoneal cavity through a small sized canula, which was attached to Bowditch's aspirating instrument. The trocar was introduced near the umbilicus. The hepatic flatness quickly disappeared, giving place to tympanitic resonance.

The body of a woman, fourteen hours after death, presented complete collapse of the abdominal walls, and flatness on percussion below the sixth rib. There was considerable rigidity of the abdomen. Air was readily injected into the peritoneal cavity, causing distention and tympanitic resonance over the whole abdomen. The hepatic flatness at once gave place to tympanitic resonance.

In each of these experiments it was difficult to remove the air through the small canula by pressure over the abdomen, sufficiently to restore the hepatic flatness on percussion.

In order to obtain positive proof of the presence of gas within the peritoneal cavity, whenever, in cases of peritonitis, tympanitic resonance extends over the region of the liver, there can be no objection to an exploratory puncture with a small trocar and canula. The puncture should be made within the hepatic region, lest, possibly, if made elsewhere, the intestine might be wounded. The escape of gas through the canula is easily perceived by *the touch* and by the odor. Air injected, and allowed at once to escape, acquires an intestinal odor. If desirable, the gas could easily be collected by attaching to the canula an oiled-silk bag; or it might be aspirated and collected in a glass receiver.

The exploratory perforation thus supplies what

is lacking as regards proof of perforation afforded by percussion, and by means of percussion and the exploring trocar, in cases of peritonitis, it may be positively determined whether or not perforation exists. If hepatic flatness on percussion remain, there is no perforation of stomach or intestine. It, on the other hand, tympanitic resonance be found to extend over the region of the liver, all doubt as to the existence of a perforation is removed by an exploratory puncture in that region. It is hardly necessary to add that care should be taken, in introducing the trocar, not to penetrate the liver; not that the wound will do harm, but because the peritoneal gas will not then escape through the canula. The liver has not been penetrated if, after withdrawing the stylet, the end of the canula which has been introduced be freely movable.

A late writer in a standard work on practical medicine (*Ziemssen's Cyclopædia*), says of acute inflammation of the peritoneum, "the only difficult question is whether the peritonitis be with or without perforation. To decide this point we ought not to rely on any one single well-established physical sign, but make an accurate digest of the entire group of phenomena. Notwithstanding, the diagnosis in some cases must remain undecided." (Vol. viii., p. 208.)

By means of the simple methods submitted in this paper, as it seems to me, the question, whether the peritonitis be with or without perforation, is divested of all difficulty, and may always be decided positively.

It is assumed, in this paper, that the presence of gas within the peritoneal cavity in cases of peritonitis, always denotes perforation of either the stomach or intestine. The question may be asked, is not gas sometimes a result of chemical changes in morbid products within the peritoneal cavity, perforation not existing? Without denying the possibility of gas being thus derived, it is, as I believe, a warrantable statement, that the instances, if there be any, are so rare that they may practically be disregarded.

Recovery from perforating peritonitis, requires, first, agglutination by means of fibrous exudation, and, next, permanent adhesion by means of proliferating tissue, to some part with which the intestine or the stomach is in contact at the site of the perforation. It is obvious that the presence of gas within the peritoneal cavity must interfere with this requirement for recovery. Hence arises the inquiry whether the removal of this gas may not prove to be an important measure in the treatment.

Aspiration is probably the safest and best method for the removal of the gas. When air is injected into the peritoneal cavity through a small canula, its entire removal is not easily effected even by firm pressure over the abdomen. The entire removal is shown by the disappearance of

tympanitic resonance over the liver, and this resonance was found to remain after firm pressure, in the experiments on the cadaver which I have related. Moreover, pressure on the abdomen sufficient to remove the gas in cases of peritonitis, would perhaps do more harm than the presence of the gas. Of the different aspirators, I should prefer either my adaptation of Davidson's syringe to thoracentesis, or Bowditch's instrument, for the reason that they are more readily under control, as regards the suction-force, than the aspirator of Dieulafoy. The puncture made by a small trocar causes so little pain that it might be repeated whenever the gas accumulated within the peritoneal cavity; or the canula, closed by a stop-cock, might be allowed to remain, and aspiration repeated as often as the resonance over the liver denoted the presence of gas. The aspiration might include the withdrawal not alone of gas but of the effused liquid. The removal of the latter is desirable, inasmuch as it may separate the site of the perforation from an adjacent part, and thus prevent closure of the perforation.

In order to demonstrate the possibility of the removal of gas from within the peritoneal cavity by aspiration, the following experiment on the cadaver was made, at my request, by Dr. Thatcher, junior assistant, Bellevue Hospital:—A trocar was introduced in the region of the iliac fossa and attached to Bowditch's aspirator. The injection into the peritoneal cavity of the air contained in the syringe twice, was sufficient to substitute tympanitic resonance for flatness in the hepatic region. Afterwards the trocar was introduced over the liver, and, by suction with the instrument, the tympanitic resonance was made to disappear and give place to the hepatic flatness which existed before the injection of air.—*Medical News*.

THE TREATMENT OF HIP-JOINT DISEASE.

Hip-joint disease is acknowledged by all authors to be, as a rule, a very unsatisfactory disease to treat. Many modes of treatment have been proposed, but the method that is described here seems to me to combine better the different objects of treatment than any other method that has been previously described.

In the first place, the condition of the lining membrane of the joint is one in which, in the first stage, there is an active inflammation present. Again, almost invariably, the child or adult affected with this disease is in a broken down state of health. The majority of children affected are more or less strumous, if this expression can be allowed. The pain on motion of the head of the femur in the acetabulum is sometimes exceedingly acute. The head of the femur moving about in

its socket, the acetabular cavity, causes an increase of the inflammation of the lining membrane, no matter whether the head of the bone or the acetabulum is primarily affected. The more quiet the limb is kept the less the pain and the less severe the inflammation. In order that the head of the bone and the acetabular cavity may not be in contact and keep up the pain and increase the inflammation, the first point in all proposed forms of treatment has been to apply extension, so as to remove this source of irritation by pulling the head of the bone out of the socket. The modes of accomplishing this object are very numerous. The most common treatment is that of the application of adhesive straps and weights. This has a number of disadvantages attending its use. In the first place, the child or person to whom the dressing is applied must remain constantly in bed. Not only must the patient remain in bed, but the decubitus must always be a dorsal one. As the treatment must be a prolonged one to be of any advantage to the patient, the confinement becomes almost unbearable. It is absolutely necessary to have the patient watched very carefully, this necessitates almost daily visits of the physician. The patient, if a child, has a tendency naturally to slide down in bed, and of course the extension is destroyed. The adhesive straps, in order to be of any service, must be firmly applied. The various bony prominences over which they fall are liable to become ulcerated, no matter how carefully they are watched. The patients suffering from this disease are almost invariably patients suffering from some dyscrasia. Fresh air and exercise are essential to a cure of any of these cases.

The apparatus of Dr. Sayre, of New York, in which the patient walks on a perineal strip, does away with some of the objections that the other treatment has. It, however, has its disadvantages. In the first place, the apparatus is very expensive, and as the majority of patients suffering from this disease come from the lower class, this comes to be a very important objection to the apparatus. The extension, when the apparatus is properly applied, is good and patients do improve rapidly at times under its use.

In an incipient case of hip-joint disease what are the essential points of treatment? The hip-joint must have absolute rest. The less the motion in the joint the better it is for the patient. Any apparatus that will accomplish this is a good apparatus in this stage. The head of the femur must be removed from contact with the acetabulum. In other words, the extension must be sufficient to prevent the friction of the head of the femur against the acetabulum. The patient must not be confined to bed, but allowed to take all the fresh air and exercise possible.

By the following treatment it seems to me that all the above objects may be obtained. There is

no dressing that can carry out the first object of treatment, namely, the locking of the hip joint, better than the application of the plaster-of-Paris breeches. The roller bandages thoroughly impregnated with plaster are to be applied as follows: One long external splint made of several layers of plaster is applied, extending from a level with the umbilicus down to the knee-joint. This splint must be very firm. Another splint, very heavy, must be applied along the inner surface of the thigh, extending from the fold above to the knee below. These two splints must be thoroughly adapted to the limb and held in place by circular turns of the plaster roller. After the plaster is hardened the hip-joint will be found to be absolutely locked.

An important point to observe in the application of this dressing, is to have the external splint come up high enough, and to see that the circular bandage which turns around holds it firmly in position. The dressing should always be applied while the patient is standing on the well leg on a stool, allowing the diseased leg to hang, so as to get the advantage of extension.

To accomplish the second part of the treatment, the removal of the head of the femur from the acetabulum, let the patient wear on the well leg a raised shoe. The weight of the limb hanging is then amply sufficient to furnish a requisite amount of extension. With a pair of crutches the patient is able to go about and get all the advantages accruing from plenty of exercise and fresh air.

Only one opportunity has occurred in which the efficiency of the treatment could be tested. The case was of a girl eleven years old, who had been complaining of pain in the hip and knee for about six months. On examination the case was found to be undoubtedly a case of commencing hip-joint trouble. Plaster-of-Paris breeches and a high shoe were ordered and the child wore them for six months, going about on crutches. After an interval of six months the plaster was removed, the shoe was taken off, and the child put to bed for one week. After a week had elapsed she was allowed to get up and walk without anything. She could walk with absolutely no pain, and limped only slightly. This case happened about six months ago, and there has been no return of the trouble yet. From one case of course no opinion can be expressed as to the efficacy of any treatment. It seems to me, however, that this is without doubt the treatment for this trouble; and that if applied in time will do as much if not more than any other form of treatment. The advantages of the treatment are its cheapness, its ease of application, and its efficiency.

Plaster of Paris breeches have been used for some time in the treatment of this trouble. The high shoe on the well foot has also been used. The combination of the two is what is claimed

this paper as the best treatment of this much dreaded disease.—*Dr. Walker—Lancet and Clinic, Cin.*

SIMPLE METHOD FOR THE CURE OF OZÆNA.—Dr. Gottstein (*Gazz. Med. di Roma*) considers ozæna as a constant symptom of chronic coryza. There is no doubt that, after the interference with the functions of the glands, there is a diminution and alteration of the nasal secretion. Part of it, drying rapidly, adheres to the mucous membrane, on which it forms crusts, and it is the decomposition of these which is the cause of the odor. It is, therefore, only necessary that a limited portion of the mucous membrane should undergo atrophy to give origin to an ozæna. In adopting this theory of ozæna, it is evident that there can be no question of radical cure, since it cannot be hoped that the secretion of an atrophied mucous membrane can ever become normally reestablished. We must therefore be satisfied with the treatment of symptoms which is the most simple and convenient for the patient.

The author was led by chance to employ the following method, from which he has already, in fifteen cases of ozæna, seen the best results in less than three months.

Dr. Gottstein commences the treatment with a nasal douche, which, by freeing the cavity from its secretions, permits the recognition of the character of the mucous membrane and the extent of the existing lesion. This is followed by the introduction of a tampon of cotton, 3-5 centimetres long, which should remain in position for twenty-four hours.

About an hour and a half after the introduction of the cotton there is a little secretion from the nose. When the tampon is withdrawn the secretion is found to be fluid and without crust or odor. Twenty-four hours can be allowed to elapse between two applications of the tampon. When both sides of the nose are affected, the nose can be tamponed every twenty-four hours on the alternate sides. The tampons cause an artificial contraction of the cavities, and so increase the action of the column of air and facilitate the expulsion of the secretions, which are absorbed as rapidly as they are formed, and their desiccation is thereby prevented.—*L' Union Med.*, November 27, 1881—*Medical News.*

PROGNOSIS OF LARYNGEAL PHTHISIS.—In a paper on this subject, published in the *Archives of Laryngology*, Dr. William Porter, in answering the question:—Is laryngeal phthisis necessarily fatal?, says that the recorded opinions of authority teach that laryngeal phthisis may only be retarded, that it is progressive and ultimately fatal. Heinze says "a cure of laryngeal phthisis will most probably never be made." And Lennox Browne voices the

generally received opinion when he says "Not even the most sanguine throat specialist is yet justified, according to our experience, in giving even a moderately hopeful opinion as to result."

In his paper Dr. Porter does not subscribe to this doctrine of the inevitable fatality of laryngeal phthisis and relates briefly three typical cases which appear to support his view of their possible recovery. In each of these cases there was also disease of the lung tissue.

In the discussion which followed, Dr. A. H. Smith summed up his views in his concluding remarks, when he said that while it was barely possible that something might be done in the early stages, yet in going through the wards with his students, in speaking of those cases in which there was involvement also of the lungs, he almost envies the veterinary surgeon, who, after making careful pathological and diagnostic observations, sums up the treatment in the words:—"Axe to os frontis."

Dr. Johnson alluded to a point on which he was accustomed to rely whenever in cases in which there was no other trouble to account for the increased bodily heat, he finds chronic laryngitis associated with an irregular elevation of temperature, he gives a more serious prognosis than where the temperature is normal. He recalled one case of tubercular laryngitis, in which there was ulceration and loss of the posterior portion of one of the ventricular bands, and which he considered cured. The patient remained free from it until after the lapse of several years when pulmonary disease developed, of which he died.

Dr. Bosworth said that in the diagnosis the club-shaped arytenoids and appearances of infiltration were of value in deciding the presence of tubercular laryngeal phthisis, particularly in its early stage. He insisted that in such cases the introduction of brushes or sponges into the larynx only increases the tendency to ulceration and hastens a fatal issue. If only medicated or detergent sprays be used the prognosis is better. Three years ago he had reported thirty-seven cases of laryngeal phthisis as arrested; he had now increased his list to sixty cases; among these there were quite a number in which there was laryngeal ulceration. But in cases in which there is well-marked elevation of temperature, lung symptoms are certain, after a while to develop and carry off the patient.—*Lancet and Clinic.*

PHTHISIS WITHOUT COUGH.—Dr. Wm. H. Thomson (*Maryland Med. Journal*) recently called attention to the occasional total abstinence of cough in phthisis. The phenomenon is by no means a rare one among the insane. Very often an extensive amount of pulmonary change may occur in the insane without the usual objective symptoms. In a few cases the absence of laryngeal lesion explains this.

THE CANADA LANCET.

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This Journal has the largest circulation of any Medical Journal in Canada.

CONSULTATIONS WITH HOMŒOPATHS.

Our ambitious contemporary, the organ of the Toronto School of Medicine, has recently exhibited marked symptoms of what might be called homœopathophobia. After alluding to what it considers the indiscretion of Dr. Bristowe, and the fallacious and short sighted arguments of Mr. Jonathan Hutchinson in reference to consultations with Homœopaths, it quotes with a great flourish of trumpets the half-hearted resolution recently passed by the Royal College of Physicians of London, to the effect "That while the college thinks it *not desirable to fetter* the action of its members, with reference to any opinions they may adopt, it nevertheless expresses its opinion, that the assumption or acceptance by members of the profession of designations implying the adoption of special modes of treatment, is opposed to those principles of the freedom and dignity of the profession which should govern the relations of its members to each other and to the public; the college therefore *expects* that all its fellows, members and licentiates, will uphold these principles by discountenancing those who trade upon such designations." The italics are ours. The organ, then, without due enquiry into the circumstances, accuses a "well-known medical man" in this city of meeting homœopathic practitioners in consultation, and applies the following epithets to him for his alleged breach of ethics. It speaks of him as "besmirching his immaculate garments;" "taking refuge behind Mr. Hutchinson's very fallacious and short-sighted argument that the knife and the catheter are the same

in the hands of the rational and the homœopath," (poor Hutchinson!); that the "*pruritus secundi* does not constitute the surgeon;" that he was "prostituting himself," and was "*particeps criminis*, in inflicting a fraud upon the public."

The facts of the case are as follows: A patient who was ill of what was at one time considered an obscure form of disease of the liver, was attended by a legally qualified homœopathic practitioner. An outside opinion was desired by the family, and the "well-known medical man," alluded to by our contemporary, was requested to see the patient and give an opinion. The request was complied with, and such an opinion given to the family, in the presence of the homœopathic practitioner, as the circumstances of the case at the time seemed to warrant. There was not a word said as to treatment, or the future management of the case. The matter began and ended there. To show that there was nothing so very peculiar in this procedure, it may also be mentioned that three "well-known" regular practitioners in this city saw the same patient for a similar purpose, one about a week previous to this time, and the other two—who by the way are members of the Faculty of the Medical School, of which our contemporary is the recognized organ—about a week afterwards! During all this time, and for some days after the visit of the last named gentlemen, the homœopathic practitioner was in regular daily attendance upon the patient. The only essential difference in the position of the consultants was, that the homœopathic practitioner was present when the gentleman alluded to gave his opinion to the family, which after all appears to our mind to have been the more honorable course, if an opinion was to be given at all under the circumstances. Our contemporary may think that in all this there is occasion for great alarm, but it may quiet its childish fears. The honor and dignity of the profession are safe enough in the hands of any of the medical gentlemen above alluded to.

With reference to the propriety of meeting legally qualified homœopathic practitioners in matters of diagnosis, prognosis, and surgical procedures, where no difference of opinion necessarily exists, and where no medicinal treatment is under consideration, we entertain very decided opinions in favour of such a course, but do not wish to press our views upon those who think differently. We sympathize

very strongly, nay, we are prepared to endorse every word uttered by the "indiscreet" Dr. Bristowe, and Mr. Jonathan Hutchinson, and especially the following, by Dr. Bristowe :—

"It has been held that to break down the barriers that at present separate us from homœopaths would be to allow the poison of quackery to leaven the mass of orthodox medicine. But who that has any trust in his profession, any scientific instinct, any faith in the ultimate triumph of truth, can entertain any such fear? All the best physicians of old times, all the greatest names in medicine of the present day, are with us; all science is on our side, and we know that as a body we are honest seekers after truth. What have we to fear from homœopathy? Bigots are made martyrs by persecution; false sects acquire form and momentum and importance mainly through the opposition they provoke. When persecution ceases, would-be martyrs sink into insignificance; in the absence of the stimulus of active opposition, sects tend to undergo disintegration and to disappear. The rise and spread of homœopathy have been largely due to the strong antagonism it has evoked from the schools of orthodox medicine, and to the isolation which has thus been imposed on its disciples. If false, as we believe it to be, its doom will be sealed when active antagonism and enforced isolation no longer raise it into fictitious importance."

Dr. May, in a recent address before the San Francisco Medical Society, after endorsing the above quotation, said, he was not sure that the representatives of the homœopathic faith in this city were behind the regular practitioners in intelligence, education and gentlemanly bearing; and however much his reason might rebel against their peculiar postulates, it cannot be denied that they possess the confidence of no inconsiderable portion of the community. To be for ever posing in a militant attitude towards them is not conducive towards the elevation of medical morals. The proposal to consult with them at the bedside has raised no little outcry in orthodox circles, but it is difficult to see where the valid objection lies.

The New York State Medical Society, one of the oldest and most respectable Medical Societies in the United States, at a meeting held in New York on the 7th ult., adopted a code of ethics which permits consultations with "all legally qualified medical practitioners." In the discussion which took place on the code of ethics, several prominent physicians said, that the persecution of the homœopaths implied in the refusal to accept them as

physicians, had contributed in no small degree to the success of that school in the United States, and that in their opinion the adoption of this measure would eventually bring the two schools together, and extinguish homœopathy as a special school of practice. It was stated by some, that if the proposed code were adopted they would be ruled out by the American Medical Association, but the promoters said, the question was, whether it was right, and if so, let New York lead the van.

Professional courtesies between the homœopathic and regular practitioners in this city and other cities in Ontario, have been of frequent occurrence ever since the incorporation of the homœopathic with the regular profession in the Ontario Medical Council, and we see no good reason why it should not be the case, in so far as they have ground in common. To incorporate them with the general profession, meet together in the same Council, consult with them upon matters of most vital importance to the profession, and refuse to grant them the ordinary courtesies that even a poor unlicensed midwife would in all probability receive, is certainly most inconsistent. The insane cry against homœopaths and homœopathy has done more than anything else to bring them into prominence and public sympathy, and has contributed in no small degree to their success in this country. It is time that new lines were drawn, and those who can read the signs of the times can readily perceive that a change is coming over the spirit of bitter opposition. The remarks of Bristowe and Hutchinson, and the wording of the resolution of the Royal College of Physicians, show the changed state of feeling in England; not that the profession or individual members believe in the doctrines of homœopathy more to-day than in the past, but they are becoming more liberal towards those who differ from them. When such changes in high professional circles in conservative old England have taken place, where homœopathy has no legal status, need it be cause for wonder or surprise, if in Ontario, where they form an integral part of the corporate body politic of the profession, and are entitled to equal rights and privileges with the regular profession, there should be even a greater reversion of feeling in favor of showing them the ordinary courtesies of gentlemen towards each other, and of meeting them at the bedside in cases where only an expression of opinion in regard to diagnosis is

concerned, or an operation in surgery required, and where no compromise on the part of either consultant is demanded. We venture to assert that if such treatment were accorded them as here indicated, soon one and another would drop the distinctive title of homœopath, and finally all would merge in the general profession. Such a consummation has been more than hinted at already, by some of the leading homœopaths in England.

The resolution of the College of Physicians, it will be observed, is directed not so much against opinions as against "trading in treatment," and from certain letters which have recently appeared in the London *Lancet* from Drs. Dudgeon and Wyld, the homœopaths are quite pleased with the resolution of the college.

THE ONTARIO MEDICAL COUNCIL AND ITS (FRIENDS?).

In the interest of the Ontario Medical Council, especially at the present juncture, we cannot but express our deep regret that any Ontario medical journal should publish letters, no matter who may be their author, written with the transparent purpose of injuring any one of our well conducted Medical Schools. Such a communication appeared in the columns of our contemporary last month, and it is well known that the writer, who strives to hide behind the *nom de plume* "Medicus," is a high Council official. This writer gives, or pretends to give, the percentage of students from the various Medical Schools, who passed at the Council Examinations held last year. But the annual lists taken for several years past, conclusively prove that the percentage of pass men from the several schools varies from year to year. One year one school stands highest, and another year another—no two years showing anything like the same result as regards any particular school. For example, at the primary examination of the preceding year (1880), which was very stringent—especially in anatomy—only thirty-four candidates in all were successful; of these, nineteen were from Trinity Medical School.

The letter writer referred to, thinks he has made a great point against Trinity Medical School in his epistle, but his statistics are entirely misleading, and his conclusions utterly fallacious. It is not

well to rake up the past, which for many reasons had better rest, but it would not be difficult to explain the "alleged statistics," and to show that a good many of the best men in Trinity School at that time did not pass, nor even go up for the Council Examinations at all, owing to special circumstances then existing. That the qualifications of these gentlemen were all that could be desired is proved conclusively from the stand taken by them at a recent examination in Great Britain, where they numbered 50 per cent. of the Canadian candidates, and every one of them passed with credit. The others were from various Canadian schools, and they also reflected credit on their schools and country. Does the writer of such a letter as the one alluded to, think it possible that the course he adopts can do the Council anything but the greatest conceivable injury? If a gentleman occupying the writer's high position, publicly assumes the *role* of a violent partizan, pitting one school against another, why should not members of the the Examining Board do the same thing, and if they should, what would be the speedy result? Unless the Council is to be killed outright by its pretended friends, let this sort of thing stop at once and forever. We should feel bound to take the position now assumed, no matter which of our schools had been attacked, for we consider there is a principle at stake in this matter, on which even the continued existence, not to say the future prosperity, of the Medical Council depends. The defenders of the Medical Council might well cry out "Save it from its friends."

SALE OF POISONOUS ALKALOIDS.

The recent poisoning case in England again brings up the question of permitting chemists and druggists to sell poisonous alkaloids to any but well known and legally qualified medical practitioners. We refer to the case of the unfortunate boy supposed to have been poisoned by his brother-in-law, Dr. Lamson, a *soi disant* member of the faculty of medicine of Paris, London, and other colleges, of all of which the assumption was apocryphal. Dr. Lamson was an American, who had married, in England, a Miss John, who, with two brothers, inherited considerable property. The elder brother died suddenly, under now con-

sidered suspicious circumstances, while under the treatment of this brother-in-law. The younger brother expired suddenly after a short illness, during which he had taken certain capsules and powders administered by this same Simon Pure. A detailed and careful analysis was made of the viscera of the patient and also of the pills and powders by Dr. Stevenson, of Guy's Hospital, assisted by Dr. Dupré of the local Government Board. In his evidence, Dr. Stevenson stated that from the contents of the stomach he extracted a small quantity of morphine and an alkaloidal substance which was not morphine, but had the characteristic effect upon the tongue of aconitine. On the mucous coating of the stomach was found a spot which had the appearance of a blister, or inflammatory effusion of lymph. Some of the alkaloidal extract was injected in the back of a mouse, which exhibited signs of poisoning, and died in 31 minutes with symptoms of poisoning by aconitine. Comparative experiments were then made upon two mice with Morson's aconitine. Having ascertained the result of these, he reverted to the alkaloidal extract obtained from the liver, spleen, kidneys, and stomach, and injected it into the back of a mouse, which showed signs of poisoning, and died in 22 minutes, after exhibiting symptoms precisely similar to those of mice poisoned by aconitine. He then compared the effect of this on the tongue with some of Morson's aconitine; they were precisely similar, and lasted upwards of six hours. The pills and powders were next examined in a similar way, and some of them were found to contain aconitine in poisonous quantities, combined with quinine. One of the powders was found to contain enough aconitine to destroy 10 persons. Aconitine is an alkaloid to which chemical tests cannot be applied. It can only be detected by physiological tests, such as putting it upon the tongue, and by experimenting upon mice or other small animals.

It is, however, a most gratifying circumstance, and a matter of great importance to the profession and the public, that many vegetable alkaloids of poisonous drugs, formerly beyond the ken of the analyst, can now be detected by medical experts. But, whilst this is established, yet the fact remains that these dangerous active principles are not sufficiently guarded, or provided for by law against the sale by druggists, excepting to legally qualified

medical practitioners known to the vendor. In this instance, on the accused merely declaring himself a medical practitioner Morson's Aconitine, prepared from the most deadly variety grown in India (*Aconitum Ferox*), ten times more deadly than the German aconitine, prepared from the *Aconitum Napellus*, was, without scruple, sold in a quantity, on evidence by Drs. Stevenson and Dupré, sufficient to get out of the way ten persons interfering with inheritance. This case, and others of a similar character, which have recently occurred, both at home and abroad, point out the crying necessity for still greater precautions being imposed on druggists in the sale of poisonous alkaloids, such as aconitine, veratria, picrotoxin, curare, eserine, hyoscyamine and other vegetable poisons.

PROTECTIVE POWER OF VACCINATION.—Dr. Henry Tomkins, medical superintendent of the Fever Hospital belonging to the Manchester Royal Infirmary, England, in a paper which he read recently at Owens College, said: "The most striking of all evidences is, perhaps, that derived from the small-pox hospitals themselves. At Highgate, during an experience of forty years, no nurse or servant, having been re-vaccinated, has ever contracted the disease, and evidence of the same character I can myself bring forward, for during the whole time that I had charge of the fever hospital more than one thousand cases of small-pox have passed under my care, yet no servant, nurse, porter, or other person engaged there, has, after re-vaccination, ever taken it, though exposed daily to infection in its concentrated form. One woman, a laundress, who escaped vaccination, took the disease and died; one nurse, who some years before had suffered from small-pox, and was then considered protected, had a very mild attack; and this summer a workman, who did not live on the premises, but came in to work as a painter, was not vaccinated, and had rather a severe attack, and still more recently a servant, who by an oversight was allowed to go about her work three days before being vaccinated, had, before the latter had run its course, a slight abortive attack. Again, among all the students who during the past two years have attended the hospital for clinical instruction, not one has suffered, all having been re-

vaccinated before being permitted to enter the small-pox wards. I defy the most enthusiastic or conscientious of anti-vaccinators to produce evidence like this on his side of the question, or to bring forward even half a dozen persons, choose them whence he may, who have not been protected against small-pox, and expose them as the students are exposed, without more or less of the number taking the disease." Facts such as these should convert the most ardent anti-vaccinator from his folly, and convince him that a weapon of defence so powerful as vaccination should not be left to the pleasure of the individual, but that the State has the right and duty to look after its most thorough performance.

IODINE IN THE TREATMENT OF MALARIA.—Dr. Morrison, in an article in the *Maryland Med. Journal*, on the above subject, states that the tincture of iodine, in doses of fifteen minims three times a day, equals, if it does not surpass, cinchonidia in its action in acute malaria. It was tried in 250 cases at the Baltimore Dispensary during the year 1881, and was found more successful in effecting a cure than the usual malarial mixture of cinchonidia and arsenic. The *rationale* of its action is, that iodine destroys the organisms in the blood which cause the symptoms of malaria, or in other words, destroys the malarial poison.

TONGA IN THE LAW COURTS.—Under the heading of "Trademark Litigation," we noticed in the *LANCET* for November, 1881, a suit then pending in the U. S. law courts in reference to the use of the word "tonga," as a name for a certain drug. This was an action brought by the Messrs. Allen & Hanbury, of London, England, to restrain Messrs. Parke, Davis & Co. from the use of the word "tonga," which the former claimed was the trade mark name of the drug, and registered by them in England and the United States. Messrs. Parke, Davis & Co. were determined to defend the suit and appeal the case if necessary to the higher courts, but this has been rendered unnecessary by the complainants withdrawing the suit and assuming the costs. Tonga is a combination of barks collected by the natives of the Fiji Islands, who have employed it for many years as a remedy in neuralgia. Its efficacy was tested by Drs. Murrell and Sidney Ringer, of London, and many others, and it has been found of great value

in the treatment of neuralgic affections, especially in those of the cranial nerves.

CHRONIC ULCERS.—The following is the treatment followed in the Notre Dame Hospital, Montreal, (*L'Union Medical*). In cases of ulcers of long standing, the nutrition of the skin in the neighbourhood of the ulcer, is generally at fault, the blood there stagnates more or less, and causes in a great degree, the difficulty in effecting a cure. Many modes of treatment have been tried according to the requirements of each case. Compression applied with the limb elevated, has given the best results in ulcers of this kind. The compression is applied by means of a roller, the wound having been previously dressed with carbolic acid or oxide of zinc ointment, and covered over with a thick layer of wadding, over which is placed another covering of pasteboard, for the purpose of equalizing the pressure. When the discharge is too exuberant, or when there is much redness or flabbiness, the edges may be cauterized with nitrate of silver, and powdered alum applied to the surface of the wound. The red lotion generally constitutes an excellent application, when the ulcer secretes a great quantity of pus. It will also be found beneficial to replace the ordinary wadding by absorbent cotton, which absorbs the excess of pus, and prevents it flowing over the edges of the ulcer. In certain cases of large ulcers marked success has attended the use of the rubber bandage, applied once a day, the limb having been previously covered with a thick layer of wadding.

"STILL HARPING ON THEIR SUCCESSES."—Every mail brings us newspapers containing notices of little surgical operations and procedures, successfully performed by medical men in different parts of the country. Some of these notices, from their technical phraseology, are evidently written by a professional hand, others are no doubt written by the reporters, as for example the following:—A lad 16 years of age, in handling a loaded pistol, met with an accident which "tore away the fleshy part of his right hand. Dr. — has the young man under treatment. A couple of stiff fingers will probably be the consequence." One thing however, is to be particularly observed in connection with these paragraphs which are "always written by the editor or reporter of the paper," viz.: that there is never a word about "unsuccessful

cases," although every medical man must necessarily have a few such cases, in which the public no doubt feel an interest. It is really very kind of the editors and reporters to suppress the names of the Drs. in attendance in all such cases. We are much pained to find the name of one of the Vice-Presidents of the Ontario Medical Association (Dr. Hamilton) figuring in a questionable manner in a recent number of the *Port Hope Times*.

SIR ROBERT CHRISTISON.—The death of Sir Robert Christison, M.D., F.R.S., of Edinburgh, at the age of 85 years, is announced in our exchanges. He was appointed to the chair of Medical Jurisprudence in the University of Edinburgh in 1822, and ten years afterwards he was promoted to the chair of *Materia Medica*, which he filled for 45½ years, until his resignation in 1877. He published a "Treatise on Poisons," one on "*Materia Medica*," etc., besides contributing numerous valuable papers to the medical journals.

GRINDELIA ROBUSTA IN ASTHMA.—In the February number of the proceedings of the King's Co. Medical Society, will be found an interesting report by the committee on therapeutics, with reference to the value of *grindelia robusta* in asthma. Three members of the committee report favourably of its use, and three adversely. The article used was Squibb's fluid extract, and it was given in half drachm doses four times a day, alone or mixed with equal parts of glycerine. All are agreed that certain cases of asthma are undoubtedly relieved by its use, but it does not fully bear out the high claims made for it, in all cases.

CANADIANS ABROAD.—H. E. Heyd, M. D., (McGill), of Brantford, has successfully passed the examination of the Royal College of Surgeons, Eng., and was admitted a member on the 19th of January last. Drs. W. H. Aikins, W. A. Allen, and W. C. Edmondson, were admitted Licentiates of the Royal College of Physicians of London, on the 27th of December last. Dr. Hamilton Meikle, of Oakville, has passed his final examination in the College of Physicians and Surgeons, Edinburgh, and received the double qualification.

A NEW BLOOD CORPUSCLE.—Prof. Bizzozero, of Turin, has recently announced the discovery of a new and important corpuscular element in the blood of mammalia. It is somewhat similar to, but

not identical with, the third corpuscle of Norris. These elements are pale, oval or round bodies, about one-half the size of the red corpuscles among which they are scattered. They are best seen in the course of the circulation, but may also be observed in freshly drawn blood. They possess no stroma, contain no hæmoglobin, and rapidly degenerate into granules. These new elements are believed to play an important part in the production of thrombi.

SUBSTITUTE FOR CARBOLIC SPRAY.—The remedy which promises to become a substitute for carbolic acid spray is borax. It has no odor, and may be administered or applied in large doses without producing any unpleasant symptoms. From carefully conducted experiments by Dumas and Schnatzles, .75 per cent. of boracic acid will prevent the growth of bacteria in animal fluids. Borax has been used as a surgical dressing with marked success, and is deserving of a more extended use.

ELASTIC GUM TRUSSES.—John Bint, of this city, has shown us a sample of what he calls an "Elastic Gum Truss." The pad is soft and elastic, made from a composition similar to that used in the manufacture of bougies and catheters. From its appearance we think it will be found an improvement upon the hard rubber truss, inasmuch as it is soft and resilient, and therefore less likely to chafe the wearer.

EXAMINATION FOR LICENCE.—By reference to our advertising columns it will be seen that the professional examination of the College of Physicians and Surgeons of Ontario will be held on the fourth of April. Candidates are requested to send in their applications at least two weeks before the commencement of the examination.

Books and Pamphlets.

EPILEPSY AND OTHER CONVULSIVE DISEASES.—By W. R. Gowers, M.D., F.R.C.P. London: J. & Churchill. Toronto: Willing & Williamson.

We can confidently recommend to our readers this work of an accomplished scholar, as one of the best on the subject extant, both in the consideration and treatment of those forms of the disease which are the result of organic changes that can be recognized after death, as also of others expressive of a condition of the brain not evidenced after

death by any visible alteration. From the 1450 cases given, Dr. Gowers has attempted the difficult task of separating the severe cases of hysteroid convulsions from those of simple epilepsy; the various predisposing and exciting causes are carefully considered and commented on, the general character of the attacks, and symptoms in detail, the forms of warning, and the proportion of cases in which consciousness is lost so early that the commencement of the fit is unfelt. He states that loss of consciousness precedes or accompanies the first symptoms in half the cases, in the other half the patient is aware of the commencement of the attack. These proportions agree closely with those ascertained by Romberg and Sieveking. The various forms of warning, whether unilateral, bilateral and general, visceral, cephalic, psychical, or of the special senses, are minutely described. The sixth and seventh chapters are devoted entirely to hysteroid or co-ordinated convulsions. The important distinction between these and true epileptic convulsions, as pointed out by Charcot and Richer, are, 1st. The attack is often preceded by a peculiar mental state, with hallucinations. 2nd. The tonic spasm with which the epileptoid stage commences, is usually immediately preceded by violent movements of the limbs. 3rd. An attack may be brought on by compressing the ovaries or touching hysterogenic points on the surface. Dr. Gowers does not, however, consider that Charcot's views of exciting and arresting hysteroid convulsions by compression of the ovaries is to be relied upon. His experience of ovarian compression—so efficient at the Salpêtrière in inducing and cutting short attacks of hysteroid epilepsy—is, that in England it has failed to produce a marked effect on the patients suffering from this affection. We quote a few of the diagnostic characters of epileptic and hysterical fits. Onset in epilepsy sudden, hysteroid often gradual; scream in epilepsy at onset, in hysteroid during course; convulsions in epilepsy, rigidity followed by jerking, in hysteroid rigidity or struggling, throwing limbs about; micturition in epilepsy frequent, in hysteroid never; defæcation in epilepsy occasional, in hysteroid never; talking in epilepsy never, in hysteroid frequent; duration in epilepsy a few minutes, in hysteroid half-an-hour or several hours. In the treatment of the disease, Dr. Gowers finds often great benefit by combining the bromides with digitalis, belladonna, tincture of iron and

borax, according to existing condition. Our readers will find this work an admirable compendium of the diagnosis, prognosis and treatment of this formidable disease.

THE SCIENCE AND ART OF MIDWIFERY.—By William Thompson Lusk, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, etc. 8vo., pp. 687, with numerous illustrations. Cloth, \$5. New York: D. Appleton & Co., Toronto: Willing & Williamson.

It appears there is to be no lack of American authors in this branch of medicine. A short time since we reviewed in these pages a treatise on midwifery by Dr. Glisan; and it was announced some time ago that Prof. Parvin, of Indianapolis, had a work in preparation. The work before us is fully abreast of the times, every recent advance in the science and art of midwifery being faithfully recorded. The work is a most creditable one, and will reflect honor on the American profession. The author has given special attention to the results of the labors of the French and German obstetrical writers. His style is attractive, the matter well selected, and the text fully and carefully illustrated. The work is deserving of the highest commendation.

A SYSTEM OF SURGERY, THEORETICAL AND PRACTICAL. In Treatises by various authors. Edited by T. Holmes, M.A., Cantab, Surgeon and Lecturer on Surgery at St. George's Hospital, London. First American, from Second English Edition. By J. H. Packard, M.A., M.D., Philadelphia, in three volumes. Vol. II. Philadelphia: H. C. Lea's, Son & Co. Toronto: Hart & Co.

The first volume of this excellent work on surgery, which we noticed a short time ago in these pages, embraces general pathology, morbid processes, injuries in general, complications of injuries, and injuries of regions. Volume II. embraces diseases of the organs of special sense, circulatory system, digestive tract, and genito-urinary organs. It is unnecessary to add anything to our former notice of this admirable treatise, except to congratulate the profession upon the issue of the present edition. The new binding in Russia adopted by this firm, is not only very substantial, but highly to be commended for its artistic beauty.

THE NURSE AND MOTHER. A Manual for the guidance of Monthly Nurses and Mothers. By Walter Coles, M.D., St. Louis. St. Louis: J. H. Chambers & Co.

TREATMENT OF HYDROCELE AND SEROUS CYSTS IN GENERAL BY THE INJECTION OF CARBOLIC ACID.—Dr. Levis states that he has been experimenting with a view of determining what substance may best secure the obliteration of the secreting surface, and the adhesion of the walls of the cyst with the most certainty and the greatest freedom from suffering and danger. Having selected carbolic acid as an agent which would provoke simply a plastic inflammation, he injected one drachm of of the deliquesced crystals into the sac of a large hydrocele. The new procedure was entirely painless. A sense of numbness alone was experienced, and no inconvenience was felt until, on the next day, the desired inflammatory process developed. A nine years' hospital and private experience leads the author to believe that this method is the most satisfactory for the object. For the purpose of injection, crystallized carbolic acid is maintained in a liquefied state by a five or ten per cent. solution of either water or glycerine; the crystals are to be reduced to the fluid state with no more dilution than may be necessary for this. After tapping, inject with a syringe having a nozzle sufficiently slender and long enough to reach entirely through the canula. He has never been able to detect any general toxic effects upon the system, but believes that the action of strong carbolic acid on surfaces secreting albuminous fluids is to seal them, to shut them off from the system in such a way that absorption cannot readily take place. The occluding influence of strong carbolic acid he regards as an important surgical resource in certain cases of compound fracture, destructively lacerated wounds, and ulcerating surfaces, where septic infection is inevitable. All forms of serous cysts which are usually subjected to any form of operative treatment, on the principle of producing plastic adhesion of their walls, may be deemed amenable to the treatment indicated.—*Medical News*.

CHLORAL HYDRATE IN DIABETES.—Prof. Eckhard shares the opinion of Mering and Musculus that the urine of animals under the influence of chloral never contains sugar. The author has arrived at this conclusion from the following experiments: After injecting a certain quantity of chloral hydrate under the skin of a dog, the fourth ventricle of the brain was punctured; no sugar, however, appeared in the urine. In a second animal glycosuria was first produced by puncture of the floor of the fourth ventricle; chloral was then injected and sugar disappeared. Glycosuria may be pro-

duced reflexly by section of the vagus in the neck and stimulation of the proximal extremity; but the experiment fails in chloralised animals. Similarly no sugar appeared in the urine of a dog made to breathe carbon monoxide, when chloral (five grammes) had previously been administered. This evident influence of chloral over the excretion of sugar by the kidneys has been turned to account in the treatment of diabetes; in two patients who were subjected to this method of treatment a marked decrease was observed both in the quantity of urine and in the amount of sugar which it contained.—(*Arch. f. Exp. Pathol.*)—*Glasgow M. J.*, Nov.

THE LAW OF SLANDER AS APPLICABLE TO PHYSICIANS.—A paper on this interesting subject appears in the August number of the *American Law Register*, of Philadelphia. It is from the pen of Mr. Whittaker, attorney at law, of Cincinnati, and it teaches its lesson from a very good text. He says: "There is, no class of professional men more subject to abuse, and it is believed, more powerless to obtain redress, than physicians. About clergymen the law has thrown its protecting arm, and public opinion has been wont to overlook, if not pardon their shortcomings. The clergyman is a sort of privileged person, whose character is tried before and whose conduct is regulated by ecclesiastical tribunals to which the courts of law have relegated it. Lawyers can take care of themselves."—*Lancet and Clinic*.

Dr. Bristowe, in his address before the British Medical Association, touching homœopathy, said that, if we wish to live broad and unselfish lives, we must be slow to condemn all those who entertain convictions which to us seem foolish or mischievous and logically untenable, or to refuse to co-operate with them.

Births, Marriages and Deaths.

- At Manilla, Ont., on the 3rd of January, Wm. Philip, M.D., aged 30 years.
- At New Hamburg, Ont., on the 5th ult., Dr. William H. Boullee, aged 60 years.
- In Toronto, on the 1st of February, Dr. J. P. Lynn, aged 42 years.
- At Dorchester, N. B., on the 11th ult., William Wilson, M.D., aged 77 years.
- At Chester, on the 31st of January, C. W. Hiltz, M. D., aged 41 years.
- At Frankville, Ont., on the 29th of October, 1881, A. R. Lander, M. D., aged 62 years.
- At Merrickville, Ont., on the 22nd ult., Wm. Weir, M. D., aged 48 years.

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OF THE USE OF THE OPHTHALMOSCOPE IN DISEASES OF THE EAR.

(Translated from the *Progrès Médical* of 21st Jan.)

BY C. W. COVERNTON, M.D., M.R.C.S., TORONTO.

The organ of hearing is only accessible in its peripheral portion to direct exploration. Whilst the ophthalmoscope permits us to study the fundus of the eye, the internal ear enveloped in its bony case, remains concealed from the aurist who can only diagnose lesions by indirect means or by elimination. Nothing permits us to hope that these unfavourable conditions of a purely anatomical nature, can ever change, and if we wish to arrive at a knowledge of the exact nature of the diseases of the internal ear, we must have recourse to indirect means. For some time past the ophthalmologists and aurists, Knapp, Moos, Kipp, Allbut, have endeavoured to recognize the condition of the auditory nerve, from that of the optic, but up to the present the result of ophthalmoscopic examination has established no fixity of data in observations of diseases of the ear. We may then profit by the important communication made on this subject by Professor Zaufal to the Medical Society of Prague, by calling the attention of the readers of the "*Progrès Médical*" to this subject. In the cases of nervous deafness, so frequent a form in young women and in which noises predominate, with a loss of osseous perception and a negative state of the apparatus of transmission, it is very important to know to what immediate cause is due the functional trouble, and the state of the retina will indicate that of the lamina spiralis of the axis or modiolus of the cochlea, especially from the point of view of the circulation. The same applies for sudden deafness of syphilitic origin, when a rapid exudation takes place in the internal ear, and for cerebral traumatism followed by deafness, etc. When the troubles observed have not their cause in the middle or external ear, it is often very difficult to

determine whether the lesion has its seat in the internal ear, the nerve or the auditory centres. Now an ophthalmoscopic examination will permit us to determine certain encephalic lesions, and we can often determine whether the cause of the trouble is central, peripheral or mixed. In the affections of the tympanum, it is still necessary to practice ophthalmoscopic examinations at whatever stage they may be seen, for even in the absence of all symptoms, there may already have taken place a propagation to the nervous centres. This obtains in suppurative, acute or chronic otitis, and even for catarrh, simple, acute or chronic, which may, as we have instances, produce intra-cranial complications. In revealing to us meningitis and thrombosis from their commencement, the ophthalmoscope permits us again to determine the indications for trephining. The lesions of the fundus of the eye augment or diminish with those of the meninges, the progress of meningeal lesions will be revealed by that of lesions of the retina (Allbut, Kipp, Zaufal,) and again it is by the state of the retina that we are enabled to judge of the amelioration of encephalic lesions due to trephining. When inflammation of the tympanum is continued to the meninges, the ophthalmoscopic lesions appear at first in the corresponding eye, but they nevertheless affect both eyes, and sometimes are more marked in the eye opposite. The same after trephining, it is on the corresponding eye the amelioration commences to be produced, but it manifests itself also on the other eye. A curious circumstance is that in all the cases studied by Zaufal, where a mild suppurative otitis with or without caries had produced meningitis and thrombosis, constantly were found very marked alterations of the fundus of the eye (stasis, neuro-retinitis, strangulation, etc.) contrary to that which occurs in other forms of meningitis, principally in cerebro-spinal meningitis. To more fully understand all the importance of this new element of diagnosis, we cite a case reported by Zaufal: "A young man 16 years of age, very vigorous, was attacked with mild suppurative otitis of the left ear with perforation of the membrana tympani and cervical adenitis. No method of treatment had proved of any avail, and for some time his general condition was bad. There was night fever and anorexia; on going down stairs the patient had experienced vertigo, and irrigation of the ear commenced to produce giddiness. Nothing to be

observed at mastoid process, but percussion produced vertigo. Ophthalmoscopic examination showed the fundus of the eye to be of a dark red, the redness augmenting towards the papilla of which it covers a large part on the internal side. Arteries normal, veins very dilated and sinuous; papillæ badly defined, of a dark red within; on the right papilla near to the point of exit of the central vessels, hemorrhage covering all the central part. Diagnosis: venous hyperæmia, extension to the meninges. Trephining was performed. The next morning no more vertigo on percussion or on irrigation. Patient feels well, no fever, appetite returned. The fourth day the internal part of the papilla is still very red, nevertheless the veins are notably narrower and the fundus of the eye much paler. The hæmorrhagic extravasation is smaller and the borders indistinct. On the 8th day sudden elevation of temperature to 41° cent. (=Fah. 105.4.) Ophthalmoscopic examination indicating no modification, all idea of new intra cranial lesion was ruled out; accidental complication was the view entertained. It was in fact a septic fever which subsided, and the cure was complete." This brief résumé permits us to form an idea of the importance that the ophthalmoscope will acquire in the study of diseases of the ear. Let us hope that thanks to it, the affections of the internal ear will be completely differentiated, the one from the other, studied and treated in a manner really scientific.

LESIONS OF THE CENTRAL NERVOUS SYSTEM, OF PERIPHERAL ORIGIN. BY CH. TALAMON, REVIEW BY DR. A. LEONE.

(Translated from "*Il Pisani Gazzetta Sicula, Palermo.*")

BY JOSEPH WORKMAN, M.D., TORONTO.

(Continued from page 198.)

CHAPTER III.

Of some symptoms or phenomena observed, following irritation of the nerves on the periphery.

We shall bring together in this chapter a large number of scattered facts, in which a centripetal irritation, acting on the nervous centres, is carried across either with phenomena of excitation, or of paralysis, without our being able in the present

state of our knowledge, to specify the lesion produced by this irritation, in consequence of having from anatomical examination only negative results. We shall, in the meantime, admit that these alterations exist, because we cannot comprehend a functional modification without an organic one—a modification of very low relief in certain cases, more profound in others, the nature of which evades us for the moment, just as the nature of the anatomical substratum of infantile paralysis, of muscular autopsy, and of locomotor ataxia, escaped our predecessors. "Whenever no microscopic alteration is found," says Vulpian, "it is permitted to us to reserve a doubt, for the histology of the nervous system is yet but young, and certain modifications of the anatomical elements of the nervous centre may easily evade our means of investigation." It is, therefore, very probable that a modification of the cerebro-spinal axis may exist in the facts we are about to state. This irritation, we have said, is carried over by two orders of phenomena: *convulsive and paralytic*. Before entering into the clinical study of these facts, it is well to enquire as to what experimental physiology may be able to teach us in relation to the subject.

In this order of ideas and facts, the most notable have been brought under view by Brown-Sequard in his experiments on the epilepsy of *cobayes*. After finding that these animals became epileptic after section of the cords of the medulla, and above all, of its posterior cords, this physiologist demonstrated that the same result could be obtained by irritation of certain peripheral nerves; thus the stretching, crushing, or section of the sciatic, or the popliteus internus, as also the irritation of the visceral nerves, acted. Brown-Sequard, in fact, succeeded in rendering epileptic some *cobayes* on which he had cut the grand sympathetic in the abdomen. Facts of the same sort have been observed by Vulpian, and by Hayem on rabbits, cats, dogs, and other animals of the mammifera. Brown-Sequard brings in the vaso-motor nerves to explain the production of this artificial epilepsy. Prof. Vulpian, however, has combated this theory in his lectures on the vaso-motor apparatus. "Why," asks this author, "desire absolutely that the construction of the cerebral vessels should play so important a part in the production of this epilepsy, when the anatomical elements of the encephalon can be modified directly by the

irritation coming from the periphery?" And truly we would say the same; because, if the peripheral irritation be capable of modifying the vaso-motor centres, that is not for us a valid reason for the denial of its capability also to modify, and much more actively, the nervous cells with which the cord conductive of the irritation is in direct continuity. This hypothesis is the more rational; it is that which has been proposed by Handfield Jones, in England, Jaccoud, in France, and Wier Mitchell, in America, and it has been adopted by Charcot in his lectures on urinary paraplegia. In the experiments of Brown-Sequard in the artificial epilepsy of cobayes, the phenomena of excitation occupy the first position, but in the same experiments it was likewise observed that intense irritation of the centripetal nervous fibres sometimes determines a weakening of the nervous action in the part of the medulla corresponding to the insertion of the nerves irritated. This fact also has been confirmed for us: 1st, by the observations of Herzen, Lewisson, and Comhaire, who availed of mechanical stimuli on various species of animals; 2nd, by Vulpian, who effected his studies by means of faradization on rabbits; 3rd, by the celebrated observation of G. Echeverria on man.

Hitherto we have what has been taught by experimental pathology. In all these experimental facts it is necessary to note with Vulpian, that, with the exception of the artificial epilepsy of *cobayes*, the phenomena produced by centripetal irritation are always of short duration; a fact not observed in man, in whom, as we shall see, they are, on the contrary, more or less persistent. In the clinical facts we are about to state, we shall first speak of the phenomena of *excitability*, and afterwards of those of *inexcitability*, or *depression*.

A. Phenomena of excitability.—Among the various clinical manifestations derived from the irritation of the nerves of the periphery, we shall select those which seem to be derived more directly from the modification carried to the central system. And here again we shall take as our basis of the description, the nervous phenomena observed on persons who had undergone amputations. These nervous phenomena are of two orders; the one local, the other distant. The first have been described and well studied by Mitchell, under the name of the neuralgia and choréa of stumps. The most notable example of this sort of neuralgia is

that reported by Dr. Nott: a man whose leg had been amputated was taken with atrocious pains in the limb operated on, a short time after the operation; amputation was performed a little higher, and afterwards an inch of the sciatic nerve was excised (?) in the popliteal hollow—no relief. It was necessary to amputate the thigh; this time without good result. Dr. Nott then cut off an inch of the sciatic below the pyramidal muscle. This piece of the sciatic was the first that appeared to the naked eye sound; but microscopic examination was not made. This last operation gave a partial amelioration. Analogous phenomena are also observed following traumatism the most various. In the treatise of Swan numerous examples of these neuralgias are found; facial neuralgia from dental caries is a type of it. Mitchell relates many examples of this sort, and in all the cases he attributed the persistence of the neuralgia to an ascending neuritis. Vulpian, on the contrary, thinks these neuralgias frequently have another mechanism, and that they depend on a modification of the grey substance of the medullary centre. This hypothesis of Vulpian has the merit of explaining other facts, of which it is difficult to render a reason, as, when the neuralgia is reflected upon the nerves of the sound side; thus in one of the observations published by Hutchinson, after a wound of the cubital nerves and the median of one side, the pain was localized in the hand of the opposite side. Pirogoff, as cited by Mitchell, relates an analogous fact of a wound of the right brachial plexus. Ollivier has communicated to the society of biology an interesting observation of this sort of reflex neuralgia. A woman received a blow which bruised the fifth intercostal space. After a few months she felt in this region occasional sharp pains, and some months afterwards shooting pains, with formication and prickings on the right side of the neck, in the clavicular region, and along the arm and forearm down to the ring finger and the inner half of the middle finger. These pains disappeared in a few days under the influence of subcutaneous injections of morphia. Now this fact cannot be explained unless by admitting with Ollivier, that the contusion of the fifth intercostal nerve had determined in the cells of origin of this nerve, a morbid excitation, which was propagated to the proximate cells, and carried, by means of the sensorium, to the periphery of the nerves proceeding from it.

Besides neuralgias as local manifestations of irritation of peripheral nerves, Mitchell speaks of the chorea of persons who had undergone amputations, as another phenomenon of excitation. "The muscles of stumps," he says, "especially in cases of arm amputations, are always in such a state that the emotions and the changes of weather, determine in them spasmodic contractions," and he sustains this opinion by two examples; the first of which was an amputation of the left arm; after a certain time spasmodic contractions in the stump occurred every time the individual attempted to move it; at the same time slight stretchings in the muscles of the face on the left side were observed. In the second example, amputation of the forearm at its lowest third, three months after the operation spasmodic movements of the stump, not only in the forearm, but in the muscles of the arm were seen; the forearm was the prey to a continual agitation, both night and day, without any truce. These movements began to reach the shoulder, the muscles of the trunk, and of the neck (on the right side). In this case Mitchell is in accord with Vulpian, in regarding these movements as due to some nervous lesion, originally limited to the stump, which had afterwards determined a central irritation that was manifested in reflex spasms. Vulpian adds that the morbid modification is located in the grey substance; he says, "this modification is different from that of neuralgia, only by its nature or its seat, but in certain cases it may co-exist with it," and this opinion has been confirmed by Mitchell, who says that "it is not rare to find individuals in whom the spasmodic movements are accompanied by violent neuralgic paroxysms." Langstaff gives an example of this. The tendency of these nervous phenomena to radiate into neighbouring parts, has been demonstrated in two examples by Mitchell, in which the motor excitation extended from the nerves of the arm to the facial nerve in one case, and to the nerves of the neck and trunk in the other, that is, from the cells of origin of the facial, to those of the nerves of the neck and the trunk.

We have said that the nervous phenomena developed after irritation of the nerves at the periphery, are, some local, and others distant from the lesed point. We saw then what those phenomena were, which take place also in parts distant, or better to say, which are extended into the whole nervous sys-

tem. We have not spoken, nor shall we speak, of tetanus, nor of hysteria, neuroses which form in themselves a very complex question. We shall limit ourselves to speaking of cases of epilepsy observed in man, following amputations or traumatism, analogously to our remarks on the epilepsy of *cobayes*. Mitchell saw, in a person whose hand had been amputated, muscular spasms produced in the extremity of the part cut, which ended in true epileptic accesses. The median and cubital nerves were trebled in volume and as hard as tendons.

Examples of cases following traumatism have been very numerous: in 41 observations of peripheral epilepsy, collected by Brown-Sequard in 1869, many appertained to traumatism, and more especially to lesion of the sciatic nerve, or of its branches, and to lesions of the elbow and the hand. The most corroborative observations in this relation are those published by Billroth in 1872, by Schaffer in 1873, and above all those by Magnan, of which we shall now give a very fine example. In February, 1862, a man who never had epilepsy, received a kick of a horse on the posterior part of his *left* heel. The contused wound produced by this injury cicatrized in a few days. In the course of the month of March he several times experienced a sensation of cold, which went from the wounded heel, with cramps, to the malleolus. On the 11th of April the sensation of cold, which he compared to a drop of cold water running between the skin and the flesh, went from the heel to the malleolus, and was followed by strong cramp and convulsive shakes; these shakes reached the thigh, afterwards the arm of the same side, and the patient lost consciousness; he fell, bit his tongue, and urinated; an instant after, he rose stupified and stooped, and without any memory of what had taken place after his fall. On the 14th of May he had a fresh attack, and from that time forward numerous accesses, at intervals of shorter or longer duration. This patient was apprised, from 24 to 48 hours beforehand, of an approaching attack, by an aura in form of the sensation of cold water running from the cicatrix on the heel. Sometimes the convulsions were generalized without loss of intelligence, in this case the initial phenomenon was always the aura in the left heel, followed by disturbances in the leg, the thigh and the arm; afterwards he felt a sense of constriction in the throat, oppression and difficulty in the respiration; lastly, the arm

and leg of the *right* side were seized by tonic and clonic convulsions, and the attack ceased without loss of consciousness. This case very clearly demonstrates the route of the centripetal irritation, now extending itself simply to the medulla and to the bulb, and then advancing to the encephalic centre, carrying thence the loss of consciousness.

Larrey relates the case of a soldier, in whom accesses of epilepsy were produced after an operation at the bend of the elbow, in which the internal cutaneous nerve was wounded. The patient felt a keen pain at the level of the cicatrix, followed by a sensation of cold, which ran through the tract of the nerve; convulsions immediately succeeded. Several small moxas along the course of the nerve, and applications of a little potassa on the same parts, caused the accesses to disappear. S. Wilcks, in his *Lectures on the Diseases of the Nervous System*, relates a short analogous observance of a case of wound on a finger. Other examples of the same sort, with phenomena of choreic form, are known. Prof. Wier-Mitchell gives a very fine example, cited from Dr. Packard, in which the chorea had its origin from a traumatic lesion of the nervous filaments of the thumb. Malden cured a chorea by extraction of a carious tooth. Charcot, in his lectures *On Diseases of the Nervous System*, has related the history of a lady who, by falling from a carriage, suffered a contusion on the left thigh. After some time she felt in the injured limb a sharp pain, along the course of the sciatic nerve, and shortly after a tremor in the whole leg. At first this tremor was transient, but it became afterwards permanent, and extended to the whole limb.

B. *Phenomena of depression*.—These phenomena may take place, now in a member corresponding to the irritated nerve, again on the opposite side, or yet in a member, or a group of muscles, more or less distant from the injured part. Here are examples:—Larrey, in his memoirs of military surgery, relates that in the Syrian campaign the slightest wounds were very frequently followed by complete paralysis of the corresponding limb. He explains this paralysis as proceeding from lesions of some superficial branches of the cervical pair, under the influence of the asthenic and stupifying qualities of the climate of Syria in the hot season, in which these accidents took place. Brown-Sequard relates a case of paralysis of both arms, following a displacement of the ulna; the paralysis ceased with

the cessation of the traumatic pathological condition, and did not again appear. Boyer relates another case similar: the reduction of a luxation of the left ulna was followed by paralysis of the forearm, and some time after by paralysis of the corresponding lower limb. Wier-Mitchell publishes many cases of paralysis in regions distant from the lesed parts, and he associates the facts with cases of cerebral irritation consecutive to traumatism; he explains them as a species of local determination from the nervous commotion received. Many other authors cite examples of the same class,—as Marshall Hall, Kennedy, Rochè, and Goyot. We shall record only the observations of Rochè, as the most striking: a student of medicine, after the extraction of two molar teeth from the upper jaw, was seized with atrocious pains and convulsions in all his members, and finally with complete paralysis of the left arm; speech was lost, but his intelligence was perfect. After a quarter of an hour, he felt a formication in the paralysed member, and in an hour the functions of the arm were completely re-established; he recovered speech at the same time.

ARSENICAL POISONING.

BY A. C. BOWERMAN, M.B., BLOOMFIELD, ONT.*

(Continued from page 203).

Arseniuretted hydrogen gas, containing one grain of arsenic to the cubic inch, is a most deadly poison, and at a moderate heat arsenical compounds pass into a gaseous state; while Dr. Tidy tells us that volatility and virulency usually go together. Now if our walls are hung with paper containing from 14 to 17 grains of arsenic to the square foot, or even a much smaller quantity, the amount of this noxious gas set free in a room exposed to a midsummer's heat, or even to that of our common wood or coal fires, must be sufficient to produce many of the symptoms of arsenical poisoning; for we have already seen that many evil effects arise from the use of arsenically colored lamp shades—as the metal is decomposed by the light and heat of the flame. How easily the symptoms thus produced might be masked by other less characteristic ailments; and how readily one might thus overlook

* Read before the Quinté and Catarqui Medical Ass'n, Feb. 1, '82

this grave cause of a most alarming condition in our lack of proper sanitary precautions !

An eminent English authority (Groves) says, "The frequent occurrence of arsenical poisoning from paper hangings is very generally overlooked by medical men, many even when it is pointed out will not believe in it. This arises no doubt in most instances from the symptoms which are produced being so various and having such a strong resemblance to symptoms arising from totally distinct causes." It is a fact to be remembered, as observed by Bartholow, "that in consequence of the high degree of inflammation which arsenic excites when applied externally in sufficient strength, absorption does not follow its local use ; but *weak* applications may excite dangerous symptoms by diffusion into the blood." It is likewise a physiological condition of the blood to offer an alkaline reaction, and being separated from the surface by a thin endermic membrane only, an osmotic flow is readily produced through this membrane—from without inwards, whenever an acidulated application is made to the integument—(and arsenious acid offers a feebly acid reaction in solution). The facilities for the absorption of this noxious element are thus seen to be all that can be desired in the way of activity and certainty. Bartholow, in his *Therapeutics*, says, "Symptoms of poisoning follow the inhalation of arsenical fumes. Numerous instances have occurred in which wall-papers colored with arsenical pigments have poisoned the occupants of an apartment. Garments colored with aniline dyes fixed by arsenical mordants, have induced local ulceration and systemic symptoms, from absorption of arsenic. Applications to a large portion of even unbroken integument have in numerous instances excited dangerous symptoms and produced fatal results."

I have previously noticed that the inhalation of arseniuretted hydrogen gas is attended with most disastrous consequences. Quoting from Mr. Carr, I find that Dr. Fleck, from confirmatory experiments, concludes "that there can no longer be any doubt of the possible presence of arseniuretted hydrogen gas in the air of a room hung with paper which is colored with arsenical green ; that the evolution of gas takes place on account of the joint action of moisture, etc., of organic matter (especially such substances as are used in fixing the paper to the wall) ; and that wherever free

arsenious acid is in contact with organic substances, the evolution of gas is possible. The danger is therefore not confined to green, but may arise from any color which contains arsenic." Prof. Roscoe says, "Hydrogen is evolved during the growth of mould and certain fungi, and it is possible that if arsenic compounds are present where such growths are going on, arseniuretted hydrogen may be evolved. This (he says) may perhaps explain the evil effects noticed when arsenized wall-papers are employed." It might not be amiss to bear in mind that, according to so valuable an authority as Roberts Bartholow, "recovery from the effects of acute arsenical poisoning is rarely complete." Once having recognized this fact, I think it would not be long before every article suspected to contain arsenic would be excluded from domestic use.

A well marked difference is known to exist between the symptoms produced by arsenic taken *per orem*, and those arising from its action in the form of gas or dust. As pointed out by Bartholow, the administration of arsenic in even medicinal doses is not unattended with danger, in consequence of the individual idiosyncrasies to the action of this metal. The following cases, under my own limited observation, will serve to illustrate the extreme susceptibility of some persons to the administration of pharmaceutical preparations of arsenic.

A. B., æt. 28, male, delicate and of sedentary habits ; troubled with an obstinate pityriasis, was ordered the following prescription :

R—Elix. ferri et calisaya, ʒiij.
Fowler's sol. of arsenic, ʒij.—M.

Sig.—A teaspoonful three times daily, after eating.

The above preparation of Liq. Arsen., I think, was made after the U. S. P., consequently each drachm contained about a ½ grain of arsenious acid. One grain was therefore the total quantity put into the prescription, and although the whole quantity was not taken, yet the result was nearly fatal. The medicine was first taken on Tuesday, after dinner, again after tea, and again on Wednesday, after breakfast. Not being content with this, the patient, in his eagerness to accomplish a cure, took a dose during the interval more than was ordered, thus taking five or six doses daily. For some days previous to the exhibition of this remedy, the man had been suffering from an acute

bronchitis with considerable expectoration. Bartholow says, "Arsenic stimulates the cerebral functions and induces a feeling of well being, and in some subjects, decided mental exhilaration." On Wednesday our patient experienced great exhilaration, amounting almost to intoxication; but on Wednesday night a severe constricting headache supervened, with restlessness, sleep disturbed by nausea, great tenderness over epigastrium, with occasional colicky pains. On Thursday the remedy was continued irregularly, the cough had become loud, harsh, and had a metallic ring; voice grating and expectoration very difficult. The tongue was covered with a white coating, except the tip and edges; the face presented a pinched expression; eyes sensitive to light; eyelids swollen at the inner angle; constricting headache; considerable nausea and want of appetite. Severe pain in the back obtained from the first; palpitation of the heart became excessively painful. Frequent retching prevented much sleep on Thursday night, while all the above symptoms became more exaggerated on Friday, when a settled condition of melancholy prostrated the patient. Cold chills now came on, with sighing, yawning and frequent hiccough. Nothing was taken but some mucilaginous drink, and the cause faintly suspected. About 3 a.m. of Saturday, however, the patient awoke in great distress, as if apprehending some calamity. The physician on visiting him, found his condition as above described and with the face now puffed out like a blister, eyes nearly closed, violent and most painful palpitation, nausea, griping pain in the abdomen, pain in the back, etc. The patient remarked a peculiar flash, as of an electrical spark, in the outer side of the right eye; this remained and gave considerable annoyance for some weeks after abatement of the other symptoms. Stimulants, diaphoretics, etc., with mucilaginous drinks were administered freely and continued through Saturday and Sunday, when all the alarming symptoms abated. On Monday evening patient left his bed, still however complaining of great prostration. In the above case so near a fatal termination, less than a grain of arsenious acid was taken, in not less than 15 or 16 doses, and spreading over a period of about 72 hours. It is now manifestly impossible, in view of the above, to accurately estimate the individual susceptibilities of people to the action of this remedy, until we have prescribed

and carefully watched against any untoward results, when the administration may be immediately discontinued.

The second case coming under my notice was that of a boy, *æt.* 4, suffering from chronic eczema since early infancy. I have good authority for saying that he had been taking Fowler's Sol. of Arsenic for about four weeks, but in what doses I do not know. The medicine was ordered by a physician some miles distant, and the child had only been seen by the doctor twice since the remedy was begun. Nothing unusual was remarked by the mother, except frequent nausea, until the period of which I am speaking, when, after eating immoderately of currants and raspberries, the child was seized with vomiting, intense thirst, fever and great abdominal pain. These symptoms having been attributed to the excessive ingestion of unripe fruit, an enema was ordered, which had the effect of removing a great quantity of impacted fecal matter, composed largely of the seeds of the fruits eaten. Much relief was given by this course, but only of temporary duration. Vomiting was with difficulty arrested for short intervals. The specific cause in this case was not even suspected by me, until the vomited matters assumed a bluish-green color not unlike solution of sulphate of copper. Dr. Ingersoll of Picton was now called and diagnosed the case, beyond doubt, as due to arsenical poisoning. A fatal result seemed inevitable, and all efforts to the contrary were unavailing, the child dying in the utmost conceivable agony about 36 hours after my first visit.

I submit to the judgment of the gentlemen present, whether in this case the administration of arsenic would have been injurious, had not the excretions been suspended by the ingestion in immoderate quantities of unripe fruit, and thus preventing the elimination of the metal by the natural outlets?

A third case, of a middle-aged lady, cancerous diathesis (as diagnosed by a Rome, N.Y., specialist). She always speaks of the cancer-humor (whatever that is) affecting her in most unaccountable ways; and under the advice and attention of this same specialist, she takes considerable quantities of his celebrated "Cancer Remedy," which I am told contains arsenic. These "cancer cures" are not unfrequently met with, and I am informed that most of them contain arsenic as an ingredient

in their composition. These are generally prepared from secretly held formulæ of supposed value, and I believe are most diligently dandled before the eyes of victims to every sort of humor, by those gentlemen prematurely delivered into our honorable ranks, and who advertise themselves after the following manner, viz.:—

Dr. —, Physician, Surgeon, Accoucheur, Corner for the Co. of —, (Specialty, the Treatment of Cancer and all diseases originating from impurities of the blood).

It was after a dose of some one of these nostrums that our patient found herself in a condition closely bordering on that sort of permanent relief seldom desired on the part of our patrons. As only a single dose had been taken, the result fortunately was not fatal. Now until it is thoroughly understood that arsenic forms so prominent a factor as it does in the preparation of a multitude of articles of daily use, the deleterious effects of its inhalation and absorption, in even small quantities, must continue to be overlooked, and as a consequence be passively permitted to still obtain. Mr. Carr says, "The question whether one is poisoned by dust or is a matter of interest to the medical profession, but it is of little consequence to the public." And likewise he says, "The consideration of arsenical poisoning at once raises the question of freedom of action. Perfect liberty consists in freedom for every man to do that which is right in his own eyes; but it certainly is not a justifiable use of freedom for manufacturers to saturate our walls, furniture or clothing with subtle poisons, which, by impregnating the air we breathe, frequently produce serious illness and often have led to loss of life." The manufacturer takes advantage of the purchaser's ignorance and thus effects a sale of goods that he well knows would be shunned by every intelligent person, were he to append to his wares a label to the effect that they were goods highly impregnated with arsenic or any other subtle poison.

From this standpoint the matter becomes a question of great public importance, and to eradicate the evil the necessity is equally important, of securing requisite legislation to this effect; for while we encourage immigration, should we not by every legitimate means in our power, endeavor to protect the lives of those people who are becoming citizens of our Dominion, and not by neglect be guilty of impairing or destroying their own and their chil-

dren's health and thus striking a fatal blow at the very root of our anticipated national future, when all this can be remedied by the prohibition of poisonous materials designed for domestic use? The Prussian, French and Bavarian governments forbid the manufacture and sale of wall-papers colored with arsenical pigments. Much effort has been made in Great Britain to obtain similar legislation, but the only good result has been to render the sale of *small* quantities of unadulterated arsenic very difficult, while the manufacturers of wall-papers boast of using tons of the crude article per week. As it generally, I believe, falls within the province of the medical profession to institute the initiatory proceedings in every department in which the public health is concerned, I submit that it can scarcely be considered out of place that this question should originate in a medical association, and its merits be discussed by those best qualified to estimate the importance of its consideration.

In conclusion, Mr. President, I ask, would it not be wise, in view of the authorities from whom I have quoted, to urge the adoption of legislative acts to render illegal the manufacture or sale within the Dominion, of any poisonous materials of whatever form, unless it be distinctly stated to the intending purchaser that the articles used or exposed for sale are of a highly dangerous character? Considering that in nearly every case my authority has been English, and that a very large per centage of manufactured goods—including wall-papers—are imported from England, the necessity for an enquiry into this question is by no means lessened; and I respectfully suggest that this subject be brought to the notice of Parliament, in connection with the movement for the promotion of better sanitary regulations throughout our provinces.

FROST BITE NECESSITATING DOUBLE AMPUTATION.

BY JAMES GRANGE, M.D.,

Physician and Surgeon to the Royal Cariboo Hospital,
Barkerville, B.C.

S. F. A., aged 39. Had been drinking some in the morning of Monday, Nov. 14th. Taking some brandy with him, he started for the Horse Fly Country from the Forks of Queensville early in the day, by way of Beaver Lake trail. When about eleven miles out he was wholly overcome with

drink, and falling asleep he did not return to consciousness till aroused by a passing Chinaman on Wednesday, about two o'clock p.m., having slept about fifty hours on the snow covered ground without covering or shelter, the thermometer indicating more than ten degrees below zero at the Forks, a valley probably five hundred feet lower. The Chinaman, not being able to get him along, hurried on to the Forks for help.

Meantime the poor man being exceedingly thirsty made his way to a brook about fifty yards distant. In this effort he first discovered that his feet were both frozen. One elbow was slightly frozen, but his hands had almost wholly escaped as he had thrust them in his bosom. Having taken a large draught of water he felt very weak and chilly, and was obliged to lie down again a short time. Then seeing his horse a little way off (for the faithful animal had not left his master, a circumstance not uncommon in this sparsely peopled region), he undertook to saddle him, but his strength failed and he was obliged to lie down till help came from the Forks, which arrived about six o'clock. He was first given a little brandy, then a fire was kindled and he was warmed, keeping his feet from the heat. Hot tea and some food were given him but he could take very little. He was then placed on horseback, and after a weary ride of four hours reached the Forks at about three o'clock Thursday morning. The frost was then extracted by placing the feet in ice-cold water, and rubbing them with the hand. The attendants say the parts were frozen solid to near the middle of the leg. Five hours were spent in removing the frost. After resting till Saturday morning, he started on horseback, some friends accompanying him, for the Hospital, making Keithley Creek twenty-two miles the first day, Sunday made Snow-Shoe Creek, twelve miles, Monday made Antler Creek, sixteen miles over the mountain, the snow reaching to the horses sides, Tuesday reached Barkerville, fourteen miles.

The difficulty of making this journey will be more fully realized when it is understood that this region of country is composed of very uneven ground, steep hills to climb and deep valleys to cross over most part of the trail. On his arrival he was admitted to the hospital, Nov. 22nd. The patient had endured the journey much better than was expected. Was quite cheerful, in very little

pain, appetite pretty good, evacuations natural, sleep not much interrupted, pulse 84, line of demarcation beginning to form a little below the middle of the tibiae, feet cold and of a very livid colour.

I expressed the opinion that the feet would have to be amputated; but as a different opinion had been given by a party here professing considerable medical skill, though he had never heard a lecture on medicine (for we have empirics here as well as in other parts of the Dominion), I was unable to get the consent of the patient till Dec. 6th. By this time nature had done so much towards amputation, and the patient was suffering so much loss that all opposition was withdrawn. Having procured the best assistance I could I proceeded with the amputations. The patient, though a large man of superior physical powers, went under the influence of chloroform without any difficulty. Large warm flax seed poultices had been applied, enveloping the feet and reaching nearly to the knee and changed twice daily, and the parts had been washed with carbolized water at each dressing. The parts above the line of demarcation were not swollen and appeared perfectly healthy, so I formed the flaps from a point about three inches above the line. The operation was not done very quickly. All being completed, I noticed that it lacked about ten minutes of an hour since the patient began to inhale the chloroform. Soon after the operation the pulse fell to 62; administered stimulants. Reaction set in in about two hours. During the next two days the pulse reached 116, after which it gradually fell to 80. The wounds were carefully washed with carbolized water and dressed with cloths dipped in the same. The dressings were wet twice daily with the same antiseptic, and not removed till the eighth day when the wounds were found united by the first intention. I think it very remarkable that so serious an operation should be followed by no untoward event, after such terrible exposure and so much delay before operating.

THE next meeting of the International Medical Congress will be held in 1884, in Copenhagen, Denmark, under the presidency of Prof. Panum.

A HOSPITAL and Accident Ambulance Service has been established in London, England, through the exertions of Dr. Benjamin Howard, of New York.

ENCYSTED DROPSY OF THE PERITONEUM—WITH CASES.

BY J. KNOWSLEY THORNTON, M.B., C.M., ETC.

Surgeon to Samaritan Free Hospital for Women, London.

(Reported for the CANADA LANCET, by Allan Baines, M.B., L.R.C.P., etc., London.)

The main parts of the paper are taken from notes read by Mr. Thornton at the meeting of the Harveian Society, January, 1882, with some few clinical notes by Dr. Baines, who witnessed the progress and operation of the cases. Encysted dropsy of the peritoneum is a very rare disease, and very little is to be found about it either in the general or special medical text books. The fact that two cases have occurred in Mr. Thornton's hospital practice in the last three months, shows, however, that it is a disease which we must be prepared to meet with occasionally, and diagnose from other abdominal enlargements. This differential diagnosis is very important for the proper treatment of the case, and at the same time it is extremely difficult. It is doubtful if any other form of abdominal enlargement offers the same difficulties. Before proceeding to consider these particular cases and the lessons we may learn from them, we may briefly refer to such cases noticed by others, and to such general information on the differential diagnosis as the text-books afford. Mr. Spencer Wells, in his work on diseases of the ovaries, records one case at pages 134 and 465; on the former page he gives some particulars of the case, and on the latter he tabulates it among the incomplete ovariectomies. Mr. Wells diagnosed ovarian cyst, and tapped the patient without discovering the error, and when she refilled, proceeded to perform ovariectomy. The incision revealed a cystoid cavity formed by floor of pelvis, matted intestines, and parietal peritoneum. The uterus and ovaries were in this cavity, the former roughened and the latter large. The cavity was sponged out and the incision closed. The patient was well two years afterwards. One of Mr. Thornton's cases will be seen to closely resemble this. Mr. Wells states that McDowell and Henry Smith, of the United States, have each recorded a similar case, and Peaslee in his work on ovarian tumors, states that Boinet had met with two cases in men and one in a woman. Peaslee himself had seen a case in each sex, and says, on what authority or

ground it is hard to say, that the disease is more common in the male than in the female. He also speaks of it as an extremely rare pathological condition. Dr. West, in his work on Diseases of Women, says: "I am aware of no means by which such cases are to be discriminated from cases of ovarian dropsy; as far as I know, their nature has scarcely ever been detected during the lifetime of the patient." Peaslee, in his chapter on the differential diagnosis of ovarian and other abdominal enlargements, devotes a special section to the consideration of encysted dropsy of the peritoneum. He says that it is preceded and produced by peritonitis. The fluid lies above (in front of) the intestines, the latter being bound down by adhesions, and sometimes extends over the whole anterior aspect of the abdomen, being divided into several divisions, while in other cases it is bound down by narrow limits. The abdomen is not prominent but flat. In this last statement he is partly wrong as Mr. Thornton's first case proves, and he goes on to give a tabular statement of the differences between encysted dropsy and ovarian cyst, in what he calls the third stage, under thirteen, which will not be reproduced, as ten out of the thirteen are incorrect or partly so—tabular statements as a rule being very unreliable and misleading. Peaslee is a most indefatigable collector of information, and of large experience, but is greatly inclined to generalize from insufficient data. The number of cases that have been as yet carefully recorded, render it impossible to give with any accuracy the distinguishing features of the disease. The details of Mr. Thornton's two cases are as follows, but before giving them it would be better to call attention to the fact, that the condition we are considering is entirely different from the much commoner condition in which partial collections of fluid may occur in the peritoneum as a result of the presence of malignant disease in some of the organs which it clothes. In some of the brief allusions which may be found regarding encysted dropsy, this distinction does not seem clear, and the observations are therefore of little value, and probably not worth referring to except as a note of warning.

E. S., æt. 45, married 21 years, and mother of seven children, entered the Samaritan Hospital under Mr. Thornton's care, in October, 1881. She had been sent in by Dr. Bradbury, of Cambridge,

who believed her to be suffering from ovarian tumor. The only notes Dr. Bradbury could give concerning her early history were: "I only saw her once, and then there was no kidney mischief or at least no albuminuria. I thought her a case suitable for ovariectomy." *Family history.*—Father died of old age; mother of cancer of breast, æt. 50; brothers and sisters healthy. *Own history.*—Has always been healthy; illness commenced two years ago with violent attack of retching, pyrosis and headache. Increase of size was first noticed at midsummer, 1881. The swelling was in the left iliac region, and was accompanied by a good deal of pain. Increase of size was rapid and continuous up to the date of admission. Menstruation used to be very regular monthly up to the date of admission. During the last three months it has been every two weeks and free for a week. The bowels have been loose. After the death of the patient, Dr. Bradbury referred Mr. Thornton to Dr. Ransom, of Cambridge, under whose care the patient had been during the early part of her illness, and he kindly furnished the following notes:

"I first saw Mrs. S. in February, 1880—she then was suffering from severe headache, vertigo and vomiting; there was slight œdema of the feet; urine albuminous and loaded with casts; eyesight becoming defective. There was a previous history of ague. I considered the case one of uræmic poisoning from considerably advanced renal disease. I also found during my examination of her, a swelling on the left side, projecting underneath the costal border, forwards and downwards into the abdomen, about as large as a lemon, dull and not tender, which I thought was the enlarged spleen. In January, 1881, I saw her again; she was suffering from very severe pain in the left side over the before-noted swelling; had had diarrhœa, cold chills and vomiting. Temperature 101°. The urine contained only a trace of albumen. I thought the case one of inflammation of the peritoneum or spleen, or both, from enlargement of the latter. She got much better, and under the use of arsenic the swelling lessened. In September following she called on me, believing herself to be pregnant. I corrected this impression, and gave her a diuretic mixture and never saw her again. *State on admission.*—Much emaciated—facies markedly that of an advanced ovarian case—abdomen greatly distended, the parietes so

œdematous that accurate examination was difficult, but there was clearly a large collection of fluid chiefly to the left side, and completely surrounded by distended intestines, both flanks and the epigastrium being clear. There appeared to be a slight wave of free peritoneal fluid in front of the intestines at the upper part of the abdomen. The vulva was so œdematous that vaginal examination was also difficult, but the uterus was found pressed down, os patulous and granular, cavity $3\frac{1}{2}$ inches; uterus mobile, no evidence of close connection with tumor, urine scanty and loaded with urates sp. gr. 1030, acid reaction, no albumen; tongue flabby and fissured; appetite good; much troubled by flatulence; bowels loose; both legs and feet very œdematous; left especially so. The patient was bright and cheery and able to move about briskly, and was very helpful in the ward to the other patients. Mr. Thornton was in much doubt as to the nature of the case, but was inclined to regard it as one of colloid (semi-malignant) with intestinal adhesions all round it; circumstances delayed operation longer than he had intended, and on October 28th he found her in bed and complaining of great pain in the abdomen. On examination the shape had entirely altered; there was evidence of much free fluid in the peritoneum, and the œdema of the parietes had sensibly decreased. The abdomen was resonant in front, and very tender; pulse 120; temp. ran up rapidly to 104.2; next day to 104.8. Mr. Thornton treated the case as one of rupture of cyst into peritoneum. The temperature gradually came down and the pain subsided. On the morning of November 2nd the patient did not look at all in a promising condition. Pulse 124, temp. only 99.6, lower than it had been. On enquiry found she had been vomiting, and that the urine had become very scanty and of a dark mahogany color. Later in the day finding that ordinary treatment had not relieved the kidneys, and that suppression was almost complete and patient comatose, Mr. Thornton tapped the peritoneum and drew off 21 pints of semi-purulent fluid which appeared very like a mixture of ovarian and ascitic fluid. The tapping gave great relief, and with constant poulticing over the loins and milk diet, she steadily improved though vomiting of large quantities of bilious fluid was troublesome when reaction first set in after the tapping. During the whole of this attack the urine

was free from albumen but loaded with granular casts. A few days after the attack, when the kidneys were beginning to act better, there was blood in some quantity in the urine, and from this time she went back. The mind was frequently clouded and pulse and temperature very uncertain, varying from day to day and hour to hour; the urine scanty, high-colored, and albuminous, and diarrhoea alternated with constipation. There was no rapid reaccumulation of fluid after tapping, but tympanitic distension was great and the patient was much troubled by its pressure on heart and lungs. She gradually passed into a low typhoid condition, and died on the 21st November, rather more than three weeks after the sudden rupture. Mr. Allan Doran made a *post mortem* and found uterus and ovaries fairly healthy, the latter free, the former bound to the sigmoid flexure by an old and strong band of adhesion; the intestines, omentum, etc., were much matted, and the fluid had been confined at first by these adhesions to the pelvic and hypogastric regions. The right kidney was of normal size, but in the early stage of granular degeneration; the left kidney was practically destroyed; the spleen was large, 12 oz.; the parietal peritoneum was unusually thickened and injected; there were nearly two gallons of orange-colored turbid fluid in the peritoneal cavity.

Mr. Thornton's second case, exactly a week after the death of the first, having been transferred to his care by his colleague, Dr. Percy Boulton, as a case of broad ligament cyst.

A. B., single, age 17, not emaciated, but anæmic and delicate-looking, was admitted November 28, 1881. Father, mother, two brothers and five sisters, all alive and very healthy; has never had any serious illness herself; menstruation in every way regular.

Five months back first noticed increase of size, and the increase being markedly more rapid during the last two months; was not ill at first, but two or three months back had sudden attack of pain in left side with difficulty of breathing, and was unable to lie down for three days. The doctor who was called in said that the water had gone to her lungs and heart.

Condition.—The abdomen is unusually flat for a case of cystic disease, but is if anything slightly more prominent at the lower third and to the right side. Fluctuation quite distinct and not so defined at upper part as usual; there is also a greater

source of resistance in manipulating than there would be with free fluid. The upper part of the abdomen is clear and the fluctuant area cannot be displaced or a clear note elicited by deep percussion. When lying well over on left side the dull area on right flank remains decreased, but still can be brought back along crest of ilium into right loin. The left flank is clear when she lies on her back.

The previous case being still fresh before us, and the patient's appearance suggestive of tubercular mischief, the examination was made very carefully and every detail fully weighed so as to make a determined diagnosis between encysted peritoneal fluid and a flaccid broad ligament cyst, but a satisfactory conclusion was not arrived at; however, the opinion arrived at was, that it was a flaccid cyst, for the following reasons:—

1. The change in position of patient did vary the area of dullness more than is often seen in cases of flaccid cyst.

2. Deep pressure around the margins of the fluid did not so displace it as to enable one to get a clear note.

3. When turned on left side the dull area still remained in right flank along crest of ilium, and far back into right loin.

Mr. Thornton being still doubtful of diagnosis, pointed out to those present what he considered the doubtful points.

A small incision having been made, and the peritoneum being opened, it was seen at once to be in a diseased condition, and appeared to be in same state as that described by Mr. Spencer Wells, the uterus and ovaries projecting far into the lower part being coated with a soft black yellow lymph which also coated the walls of the cavity and in some places hung from them in large membranes. The cavity having been carefully sponged out, (after draining off about twenty pints of turbid fluid) and all lymph that could be detached removed, the incision was closed, no drainage tube being used. As antiseptics were used, any fluid reaccumulating would be harmless, and the sponging with carbolic acid, it was hoped would cause sufficient irritation to set up healthy action in the peritoneum, so that any small quantity of fluid being poured out soon after the operation, would be reabsorbed.

Mr. Wells' case shows that the same result may

be obtained without Listerism, but one might have hesitated to close the cavity entirely, without a drainage tube, had any doubt been felt as to its asepticity. Fear was felt that the intestines falling in to fill up this cavity, might have become kinked, the abdominal walls and peritoneal cavity having been fairly distended with the fluid, (seven pints), but this proved a groundless fear. She had not the least trouble with her flatus, the bowels acted well on the seventh day after an enema. She was up and walking about on the 14th day, and left the hospital the 20th day after the operation. The highest temperature was 100.8° on the afternoon of the second day, and the highest pulse 112 on evening of the first day. There was at first a depression where the fluid had been, but this gradually disappeared and the abdomen was resonant everywhere on the day she left the hospital, and no indication whatever could be found of any reaccumulation; most probably the adhesions which bound the coils of intestines together and to the peritoneum would gradually yield to the pressure from above, and that as the intestines descended to fill the space left by the removal of the fluid, the lymph which bound them together would become gradually reabsorbed and disappear.

Mr. Thornton concludes by saying: With regard to the cause of this encysted dropsy of the peritoneum, I think we may accept Peaslee's statement, that it always follows, and is the result of peritonitis. I should be inclined to say local peritonitis. When we go farther back and seek for the causes of peritonitis we have a much larger field opened to us. The first of my cases shows that the condition may arise in a patient with advanced kidney disease. We know how subject such patients are to inflammation and effusion from serous membranes, and I think it not at all unlikely that the tumor first detected by Dr. Ransom was, as he supposed, an enlarged spleen, and from the irritation caused by this or from actual inflammation of its peritoneal covering the effusion first took place.

It is quite clear from the *post mortem* that the fluid was confined at first much as it was in the second case, but more to one side, the left, and reaching higher in the abdomen. The breaking apart of the adherent intestines allowed it to become generally diffused, and led to the condition which so closely resembled rupture of an ovarian

cyst. It was fortunate I had not attempted operation in this case, for the result would probably have been to hasten the uræmic condition, which ultimately proved fatal. I do not propose to dwell further upon the conditions in either case which helped or hindered diagnosis, because I think we must have many more accurately recorded cases before we can hope to avoid the errors into which Peaslee fell. I think, however, that we are in a position to say that in any case of encysted dropsy of the peritoneum, diagnosed as such in a patient with healthy kidneys, the proper treatment is abdominal section, removal of the fluid, and carefully clearing out of the sac and sponging with a mild solution of iodine, and I would add that provision for drainage is not needed. It is hopeless to expect unanimity as to the value of antiseptics in such cases; but for myself I can say that my opinion formed after my large experience of both non-antiseptic and antiseptic abdominal section is so decidedly in favour of the latter that I feel bound to give my patients the immunity from various sufferings and discomforts afforded by Listerism. These views have not been shaken by the results of my ovariectomies. At the Samaritan Hospital in the past year I have not drained a single case, and I have had only two deaths in 44 ovariectomies, and both occurred in young patients from whom I had removed solid malignant tumors.

Correspondence.

MEDICO-LEGAL EXPERTS.

To the Editor of the CANADA LANCET.

SIR,—For years past, almost the only hope to which assassins and their counsel clung, was insanity, and it becomes us as professional scientists to carefully investigate this subject, that we may thereby give an opinion, the veracity, or scientific value of which, will not be questioned, such as was lately witnessed in the testimony of experts in the Guiteau trial.

Insanity being a subject that requires the most careful study and minute investigation, is apt oftentimes to be slighted, while college study is being pursued, and while clinical observation could be made, hence many of our professional brethren receive their degree without a proper

knowledge of this important subject. Why wonder then that only expert testimony is taken into account, in our so-called—Tribunals of Justice—when we are fully cognizant of the fact, that only a few, have made insanity a special subject of study, and have had opportunities of clinical research. But it is questionable, whether the evidence given by the “so-styled” experts is always in accord with the true condition of the patient. They often have only a limited time in which to base their opinion. They often only see the patient once, and the evidence given by them will depend chiefly on the condition in which the patient was at the time of the examination. True, it could not be otherwise, but when a doubt exists in the mind of the examiner, repeated examinations should be made, and greater satisfaction and unanimity of opinion would exist, if this was made a general rule before evidence is given. All observers of the insane, have noticed the so-called fits of temporary insanity in those under their charge. These fits may only occur once or twice yearly, and may last from a week to a month or longer at a time. Just what causes these fits at times, is not definitely known; but that they do occur is undisputed. A medical examination made during one of these fits, would naturally be opposite to that taken when no such “spell” exists, and the great variance in regard to medical testimony given in court, is to be found often in the varied condition of the patient at different times of examination.

No physician who has followed the testimony of the medical experts in the Guiteau trial, will say that the evidence given, was of such a nature, that no room for doubt existed, or that the testimony given from a medico-legal aspect, was at all conclusive. Nay, more, it has to no inconsiderable degree lessened the value of expert testimony in the public mind; and has been the cause of intense mortification to the profession.

It may be said, and truly, that Judge Porter, and public sentiment, found Guiteau guilty, irrespective of medical testimony; yet, there are not a few in the medical profession who fully share in the belief that Guiteau was acting under a delusion when he shot the President.

I am, &c.,

Standish, Mich.,

P. STUART, M.D.

Feb. 13th, 1882.

OVARIOTOMY BY SPECIALISTS.

To the Editor of THE CANADA LANCET.

SIR,—I notice in the February issue of the LANCET, an article from the pen of Dr. McLean, of Ann Arbor, Mich., on Ovariectomy, in which the Dr. states that within a period of nine months he had performed ten ovariectomies, and of the ten, ten recovered. I think the doctor must be drawing upon his imagination, for some of his facts—as I am aware that in one case where he operated within the last nine months, the patient died shortly after the operation. I do not wish to insinuate that it was owing to any want of dexterity on the part of the doctor; but I take exception to the general tone of his article. It might be excusable did it emanate from a man of half a century's experience in the field of obstetric surgery, but coming as it does from comparatively a young surgeon, it partakes too much of the character of egotism, and is calculated to deter rather than encourage young surgeons who may be just as ambitious as Dr. McLean, to do good.

The Dr. states that the operation requires so much experience and dexterity that it should be confined to specialists. Here I must beg to differ with him; the operation is as easily performed as even many of our minor operations, the chief end of the battle is in the character of the case and the after treatment. The late Professor Syme, of Edinburgh, the man by whom Dr. McLean used to swear, states that the success is chiefly owing to “The more accurate discrimination of cases.” And in this connection permit me to observe that in a practice of eighteen years, some of the most lamentable failures I have met with, have been left behind as tokens, by so-called experts and specialists; in fact life is often sacrificed as the result of dexterity. I think it should be the duty of every surgeon who meets with success, to encourage others, rather than deter them. Patients are not always able to go to specialists, or to pay \$1,000 for an operation, when they might have it as safely and as carefully (if not so dexterously) performed by their family doctor.

I am, yours truly,

SURGEON.

[In the abstract of Dr. McLean's paper referred to by our correspondent, “ten” recoveries was a misprint for seven.]—Ed. LANCET.

ELECTRICITY IN SPASMODIC STATES.

To the Editor of the CANADA LANCET.

SIR,—It is not my intention to reply to your esteemed correspondent, Dr. A. M. Rosebrugh, at much length. Permit me merely to state, that, those portions of the lectures of Dr. J. Russell Reynolds from which Dr. Rosebrugh quotes, appear to me, to express, not so much the personal views of that author, as to indicate current opinions as to the conditions in which electricity “may” be useful. In the absence of some such explanation, Dr. Reynolds’ book might seem very contradictory. For example, on page 66 he tells the reader that certain effects “may” be produced by electrical treatment; among others, you “may stop” the spasm of torticollis, &c. In a future page, he gives the result of his own extensive experience, and says:—“In torticollis, *for the time being*, you can put the head straight either by a strong battery current, passed through the contracting muscles, or by faradization of the other side, the muscles of which are often weak; but *directly you cease the application, the head goes back again to its abnormal position*. I have obtained similar negative results in cases of both writers’ cramp and histrionic spasm,” (p. 102). Now, to have told us previously that we “may” apply electricity in these cases, is not to say much in its favor, with results like these as its practical outcome. Observe, that in the above quotation, both forms of electricity were used, and the method of application varied, so that there is but little chance of any better success in the hands of others.

It is true, that other writers report “good results,” “temporary improvement,” and that this agent may be used with “advantage”; but these are not cures; and we all know that enthusiastic introducers of new therapeutic agents generally credit them with curative powers which further experience shows to be illusory. Such indirect evidence as that electricity “may” be used, etc., and that it “may” relieve, etc.,—a form of expression which occurs from sixteen to twenty times in Dr. Rosebrugh’s quotations, is not to be compared to the positive testimony, the result of extensive experience, under favorable conditions, deliberately recorded by Dr. Reynolds, in which, writing of the “forms of spasm in which electricity has been most

commonly used,” he says,—“I have tried it again and again, in every available form, but have never seen it do any good,” (p. 102). Now, surely there is here a sufficient “hint” as to “Dr. Reynolds’ real estimate of the value of electricity in spasmodic diseases,” which it is suggested I omitted to convey. I preferred to accept the practical results of Dr. Reynolds’ experience, of the use of electricity in spasmodic states, rather than the fugitive reputation it had acquired; to which this eminent teacher appeared to refer in his earlier remarks.

The question at issue, after all, is one which the intelligent readers of the LANCET can very readily solve for themselves, and I have no doubts as to the ultimate verdict.

Yours respectfully,

THOMAS W. POOLE, M.D.

LINDSAY, March 6th, 1882.

MEDICAL BATTERIES.

To the Editor of THE CANADA LANCET.

SIR,—I have read with much interest the series of articles on Electricity, by Dr. A. M. Rosebrugh, as they appeared in the LANCET, and in my opinion he has done the profession a lasting service in thus bringing before us this powerful, yet comparatively untried remedy, in such a plain and practical manner.

If Dr. Rosebrugh, with his well-known mechanical turn of mind, or some one else, could now give us a simple, reliable, and a conveniently portable battery, he would confer a great boon upon the profession. The ordinary batteries are so complicated in their construction, and so liable to get out of order, that they require a practical electrician to keep them in a state of efficiency. I would suggest that there is ample field for usefulness in the direction indicated, worthy of the attention of the best minds, who have the ability for devising such instruments.

Respectfully yours,

W. PHILP, M. D.

Hamilton, March 16, 1882.

MEMBRANOUS DYSMENORRŒA—

R. Chloral hydrate.

Potassi bromi.....aa. ʒii.

Morphiæ sulphgr. iss.

Syrupi aurantii corticis.....ʒiii.

M. Sig.—A dessertspoonful in a wineglassful of water every four hours while in pain.—*Dr. T. G. Thomas.*

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the CANADA LANCET.)

The regular quarterly meeting of this Board was held January 10th, 1882, in Lansing. The Secretary presented his quarterly report. The quarter had been a very busy one, owing to the numerous outbreaks of diphtheria, scarlet fever, and small-pox in the State, which had required much correspondence and the sending out of many documents. The compilation and issuing of the weekly bulletin of health in the State is now so systematized as not to take as much time as at first. It is published in probably 200 newspapers in Michigan. In response to a request, 57 health officers of villages have begun to make weekly reports of diseases. The Board re-affirmed the demand for these reports from health officers of cities. To each place in the State where diphtheria, scarlet fever, or small-pox was reported present, a letter was written to the health authorities giving full instructions and suggestions how to prevent the spread of the disease. Documents containing elaborate and particular directions have been sent for free distribution throughout the vicinity. Each officer was requested to make a special report on the epidemic under his care, and some of the reports show how, by determined action, to stamp out a contagious disease. The number of communications written during the quarter was 1,459. The number of diphtheria documents distributed was 29,000; of scarlet fever documents, 5,000; of general rules for restriction of contagious diseases, 6,000; reprints of weekly bulletins, 7,000. Papers showing the necessity for inspection and disinfection of immigrants, their clothing, baggage, etc., and especially for a system of surveillance to their destinations, a statement was made by the Secretary, of the introduction of typhus fever in Benzie County, by Norwegian immigrants. The disease made its appearance over 60 days after the arrival of the immigrants, and spread quite freely (not being reported at the time or treated as a contagious disease by the local authorities) causing many cases of illness, and at least three deaths. The importance of inspection of immigrants at Port Huron and of keeping those believed to be liable to spread communicable diseases under surveillance until their destination is reached, and then placing them in the watchful

care of the local board of health was freely discussed. As this Board has no funds available for such a purpose, the subject was referred to the President, Secretary, and Dr. Lyster, to confer with the National Board of Health, and take such action as is possible.

A report by Hon. LeRoy Parker, relative to duties of health officers in verifying diagnosis of contagious diseases was read and ordered to be printed in the annual report. Mr. Parker reported the following: In Gaines Township, Genesee, Co., a child of Mr. B's. died of what a doctor called malarial fever, and did not report the case to the board of health, though it seems probable that it was really diphtheria. A neighbor and wife, Mr. and Mrs. B. assisted in preparing the corpse for burial. About the same time a child of Mr. S. died from "sore throat," not reported as "dangerous to the public health," and some of the children of Mr. B. attended the funeral. Soon after Mrs. B. was taken sick with diphtheria, and in turn 13 out of 14 members of the family had it, and 7 out of 10 children died. The board of health promptly isolated this household, but the attending physician's error in diagnosis, or failure to report the first case was fatal to the hopes of that family. In this connection the board adopted the following preamble and resolutions:—

Whereas, It is often difficult to recognize mild cases of diphtheria, or to distinguish such cases from a simple pharyngitis or laryngitis, and,

Whereas, such mild cases of diphtheria often communicate a dangerous and fatal form of diphtheria;

Resolved, That it is the duty of physicians and householders in reporting diseases dangerous to the public health, and of local health authorities in their efforts to restrict such diseases, in every case to give the public safety the benefit of the doubt;

Resolved, That suspected cases of dangerous diseases should be reported and precautionary measures should be taken.

The Secretary presented a report of local boards of health, showing much good work done during the past season in the restriction of contagious diseases. He read letters showing the action of local boards of health with contagious diseases, one from J. R. Thomas, M.D., Health Officer of Bay City, relative to diphtheria; one from W. G.

HYDROLEINE OR HYDRATED OIL AS A THERAPEUTIC AGENT IN WASTING DISEASES.

By W. H. BENTLEY, M.D., LL.D.,
VALLEY OAK, KY.

From *New Remedies*, September, 1881.

In October, 1880, I read an advertisement of Hydroleine in some medical journal. The formula being given, I was somewhat favorably impressed, and procured two pamphlets: One on "The Digestion and Assimilation of Fats in the Human Body," and the other on "The Effects of Hydrated Oil in Consumption and Wasting Diseases." They are ably written, and afforded an interesting study. Their doctrines are so reasonable, that I got up faith enough to have my druggist order a sufficient supply to thoroughly test the merits of the preparation.

I was ready to catch at anything to take the place of cod-liver oil. In my hands it has proved an utter and abominable failure in ninety-five per cent. of all my cases in which I have prescribed it since I have been engaged in country practice, and it never benefitted more than forty per cent. of my city patients.

The inland people, who seldom eat fish, can rarely digest cod-liver oil. Almost every week I am consulted by some victim of the *cod oil mania*, who has swallowed the contents of from one to twenty-five bottles, and who has been growing leaner, paler and weaker all the while, until from a state of only slight indisposition, these patients have become mere "living skeletons." Nearly all complain of rancid eructations, and an unbearable fishy taste in their mouth, from one dose to another. They not only fail to digest the cod oil, but this failure overloads the digestive organs to such an extent that digestion and assimilation of all food becomes an impossibility, the patient languishes and pines and finally dies of *literal starvation*. In the comparatively small number with whom I have found cod-liver oil to agree, it has proved very gratifying in its results. In my practice, by far the largest number receiving benefit from it have been children. Those who have, previous to their illness, been accustomed, to some extent, to a "fish diet," will be more likely to digest the oil, and more notably so in cold climates. Still the innumerable efforts that have been made in the shape of "pure cod-liver oil," "palatable cod-liver oil," "cod-liver oil with pepsin," "cod-liver oil with pancreatin," "cod-liver oil emulsions," etc., and so on, *ad infinitum*, attest the fact that the great *desideratum* after all is to render cod-liver oil capable of retention by the stomach, and digestible when it is retained.

As Hydroleine is partially digested oil, and this partial digestion is brought about by a combination of factors suggested by actual physiological experiments, these facts commend it to my confidence, and a trial of the preparation in seven typical cases convinces me that it possesses

a high degree of merit, and I feel that it is a duty incumbent upon me to call the attention of my medical brethren to the subject.

The first case in which I prescribed it was that of a married lady 28 years of age, a blonde, and the mother of four children, the eldest 9 and the youngest 1 year old. From the birth of this last child she dated her illness, for she made a tardy convalescence, remaining unable to walk for a month. Soon after she began to grow weaker, and soon resumed her bed, which she had not left to any extent since, not at any time being able to sit up longer than fifteen or twenty minutes. During all this time she was under charge of a skillful physician. He had tried many remedies to check the rapid emaciation; among these were several different brands of malt extract, cod-liver oil, and various mixtures of the oil. None of the oils and their mixtures agreed with her. In March, I was called and prescribed Hydroleine, a bottle of which I delivered at the time, directing her to commence with teaspoonful doses, to be gradually increased to twice the amount. It agreed with her finely, and by the time the first bottle was used she was greatly improved. She procured and used two additional bottles, and, at this writing, June 15th, is considered well.

The above case was one of general and persisting emaciation, unaccompanied by any cough or perceptible thoracic trouble. The ensuing case was one of diagnosed

TUBERCULAR PHTHISIS.

The patient a married lady, æt. 32, had been married about 14 years, and was the mother of six children, the youngest two years of age. Several of her sisters had died of the above mentioned disease. Her medical adviser prescribed cod-liver oil, and she had taken a full dozen bottles with plenty of whiskey. The oil had not been digested, although it had been retained by the stomach. Her cough had grown constantly worse, and she grew rapidly weaker, week by week. I prescribed Hydroleine for her, and she commenced to take it in April, about the 15th. It agreed with her finely. She rapidly gained weight and strength, her cough was relieved and has now nearly ceased. She has used nearly four bottles, and continues to use it, though apparently well.

I have prescribed it in three other cases, in two of which the results have been equally gratifying, but in the other case it produced nausea and greasy eructations.

From these trials I am led to think quite favorably of the hydrated oil, and I am led to believe that although it may not agree with all, it will be found of great and permanent benefit to a very large per cent. of consumption and other "wasting" diseases, and that it is destined, at no distant day, to very largely supplant the undigested oils.

HAZEN MORSE, 57 Front Street East,
TORONTO.

SOLE AGENT FOR CANADA.

TUBERCULOSIS RESULTING FROM DEFICIENT NUTRITION.

(From *The Medical Record*, New York.)

Various as are the opinions regarding the treatment of consumption, all writers concur in the belief that whatever measure is adopted, the strength of the patient must be husbanded with the greatest care, and the most efficient means employed to supply the system with that element which the symptoms indicate as being required to keep up the vitality while such course of treatment is being pursued as is considered suitable. The most striking indication of the presence of this dreadful disease is rapid loss of weight. The patient himself, prone as he is to disregard premonitory warnings of this insidious malady, cannot but observe an extraordinary difference in the appearance of his form, as first the face, then the trunk and, lastly, the limbs become soft and flabby, and the once well-fitting garments hang loosely about him, his flesh seeming to melt away, so rapid is the change.

EMACIATION.

A natural course of reasoning as to the cause and effect of emaciation under these circumstances has developed the fact that the abnormal consumption of the tissues is the result of nature's efforts to supply the waste, through the blood from the fatty tissues of the body with the requisite amount of material whose oxidation is the source of heat and nerve force, the natural supply, through the assimilation of food, having failed in consequence of an unhealthy condition of the pancreatic secretions causing an insufficient supply of chyle, or a failure on the part of the lacteal tubes, through fever or some cause, to absorb sufficient nutriment.

TUBERCLE.

As the attack upon the tissues of the body progresses, not only fatty tissue is absorbed into the circulation from unnatural sources, causing loss of strength, but particles of albuminoid tissue are carried by the blood and being deposited in channels where the system has no provision for throwing them off, form desquamated centres of disease which, in their turn, throw off infectious matter to be absorbed into the general system. The immense extent of delicate mucous surface in the respiratory passages of the lungs exposed to the contents of the minute blood-vessels which permeate their entire texture, offers the greatest and most susceptible field for the reposition of a large amount of this effete albuminoid tissue. This deposit forms the tubercle whose establishment in the lung is the beginning of that train of circumstances which characterizes the progress of that fatal malady—consumption. Thus it is seen that tuberculosis is either due to the defective action of the pancreatic juice on the fatty elements of the food, or to the non-absorption of the chyle into the blood.

ASSIMILATION OF FATS.

Fatty matter, when introduced to the stomach, undergoes little change by the action of the gastric juice, but passes, together with

the chyme or digested fibrinous and albuminous matter, to the duodenum, where it comes into contract with the pancreatic juice, and is thereby transformed into chyle, which is a very delicate saponaceous emulsion or suspension of the oleaginous portion of fat. It is when in *this condition only* that fat is capable of absorption by the lacteals, thence passing directly to the venous blood which is supplied to the lungs through the right cavity of the heart; the lungs then absorb from that blood the hydrocarbons or fatty portion, and return the nitrogenous portion to the heart, to form the globulin of arterial blood before passing into the circulation.

This function of partly saponifying and partly emulsifying fats is enjoyed by no other secretion of the alimentary canal but the pancreatic juice, unless we take into consideration the action of the saliva, which is somewhat of that nature; but as the food in most instances is subjected to the action of the saliva in the mouth for so short a time, this feature in the economy is almost inappreciable.

TREATMENT.

The close relations of non-assimilations of the fatty elements of food to wasting diseases, and especially to consumption, is understood, and reason would indicate that if by any artificial means the absorption of fat could be assisted by supplying, as chyle, a proper amount of oleaginous or fatty matter, a nutritive progress would be established which would modify the unhealthy action of the pancreas, and not only relieve the body from the depleting effects of the disorder, but afford an opportunity for treatment and recovery. With the assistance of a thorough knowledge of the chemical process which fat undergoes from the time of its introduction into the duodenum to absorption, a preparation has been introduced and extensively used by the profession in England with highly successful results, indicated by the very flattering commendations of it from many physicians who, having given the treatment of pulmonary disorders their special attention, are peculiarly qualified to attest its efficacy.

HYDROLEINE.

This preparation, to which the distinctive name of hydroleine (hydrated oil) has been given, is not a simple emulsion of cod-liver oil, but a permanent and perfect saponaceous emulsion of oil, in combination with pancreatin soluble in water, the saponification producing a cream like preparation, possessing all the necessary qualities of chyle, including extreme delicacy and solubility, whereby a ready and perfect assimilation is afforded.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonfuls, equal to 120 drops, contains:

Pure oil.....	80 m (drops)
Distilled water ..	35 "
Soluble pancreatin.....	5 grains.
Soda	$\frac{1}{2}$ "
Boric acid.....	$\frac{1}{4}$ "
Hyochohic acid.....	1-20 "

DOSE.—Two teaspoonfuls alone, or mixed with twice the quantity of soft water, wine or whiskey, to be taken thrice daily with meals.

The use of the so called emulsions of cod-liver oil during the extremely sensitive condition of the digestive organs always accompanying consumption does not usually afford beneficial results. Those of the profession in this country who have under their care cases of consumption, diabetes, chlorosis, Bright's disease, hysteria, and, in short, any disease where a loss of appetite is followed by a rapid breaking down of the tissues of the body in its effort to support the combustion supplying animal heat, are urged to give this preparation a trial. It is supplied by the agent for Canada, Hazen Morse, No 57 Front Street East, Toronto, who will forward literature relating to the subject upon application.

That many of the diseases from which mankind suffer during infant and adult life are caused by malnutrition, there can be no doubt; and the extent to which non-assimilation of the life-giving properties of food interferes with recovery from severe illness, baffling the best directed efforts of the physician, points the necessity for an agent or combination of agents sufficiently potent to replace the deficient principle and aid nature in renewing the degenerated tissues.

Realizing this need, the science of chemistry produced pepsine. Richard Tuson, F. C. S. Professor of Chemistry, London, England, in the *Lancet* Aug. 13, 1870, speaks of this remedy as follows: "Since the introduction of Corvisart and Boudault's *poudre nutritive* into medicine, in the year 1854, Pepsine, obtained from the stomach of the pig, calf or sheep, in a state of greater or less impurity has been extensively prescribed in Dyspepsia and certain other affections. According to the testimony of some authorities of high standing, long experience in the use of this agent fully justifies Corvisart's predictions relative to its therapeutic value, which were based on physiological reasoning.

There are other authorities who express doubts as to the efficacy of Pepsine. This difference of opinion undoubtedly arises from the circumstance that pharmacutists supply medical men with various preparations, all bearing the same specific name of Pepsine, but differing very considerably in their digestive powers and other qualities. In fact, I find those who speak favorably of its employment in the treatment of disease have prescribed that prepared by the best makers, while those who express a doubtful opinion have been in the habit of prescribing those varieties or makes, which the experiments of myself and others have proved to be practically without any digestive activity, *i. e.* worthless. Under these circumstances it is *absolutely* necessary for the practitioner to be certain of the *make* of Pepsine he uses. *Pure Pepsine*, thoroughly triturated with finely powered sugar of milk (saccharated pepsine) will undoubtedly produce the best results.

Experience in diseases of the stomach, dyspepsia, etc. has demonstrated in many cases, the lack of other agents required to promote a healthy digestion beside Pepsine, namely Pancreatine and Diastase or veg. Ptyalin. Pancreatine the active principle of the sweet-bread or pancreas possesses the wonderful power of emulsifying the fats and oils of food, rendering them easily assimilated by the system not affected by pepsine in the slightest degree. Diastase or veg Ptyalin, as obtained from malted barley in the *dry* extract of malt, represents the saliva, and has the remarkable property of converting the insoluble starchy portions of food into the soluble glucose, thus rendering the indigestible and innutritious article starch into the nutritive and easily assimilated food glucose.

The value of these different ingredients and the difficulty of procuring them of the right quality led Hazen Morse, 57 Front Street East, Toronto, to experiment with various combinations during seven years' employment in the manufacture of Pepsine on a large scale and with the assistance of several prominent physicians he was finally enabled to present to the profession the following formula.

Saccharated Pepsine.....	10 Grains.
" Pancreatine.....	5 "
Acid Lactophosphate of Lime	5 "
Exsiccated Extract of Malt equal to one teaspoonful of Liquid Extract of Malt	10 "

Said formula has been registered at Ottawa under the distinctive name *Maltopepsyn*, thus giving the physician a guarantee of always procuring the same standard preparation and preventing their being imposed upon by imitations of inferior quality, and at the same time putting it at as low a figure (fifty cents for 1½ czs.) as possible for such a formula to be compounded from the ingredients of the *best* possible manufacture.

Maltopepsyn has digestive power ten times greater than the best Pepsine in the market, as it digests Fibrin and Caseine, emulsifies the fat of food taken into the stomach, thus rendering it assimilable, converts starch into glucose, in fact it combines all the agents that act upon food, from mastication to its conversion into chyle, digesting all aliment use by mankind while Pepsine acts only on plastic food. Maltopepsyn also combines with the above the nutritive qualities of Extract of Malt, and the brain and nerve strengthening powers of the Acid Phosphates.

It has been found that a free acid, like Hydrochloric, does not combine well with a Saccharated Mixture, and renders it liable to decomposition, I therefore do not use it in my formula. It can be easily prescribed in solution, (say 20 drops of acid to 4 ounces of water) one half-ounce with each dose, in cases where its use is indicated.

For infants, however, Maltopepsyn will be found to yield the most satisfactory results, and the acid should be dispensed with. The necessity for the absence of acid which would tend to produce harmful results, will be recognized, when it is considered that even the slight acidity of most cow's milk, when used as food for infants, is sufficient to disagree with them.

With regard to the proper time for its administration, as before or after taking of food, opinions vary, but reason would suggest that about half an hour before eating will afford the ferment a sufficient time to combine with the existing condition of the stomach, and produce the most natural effect upon the food.

OPINIONS OF MEDICAL MEN.

46 St. Joseph St., TORONTO, Aug. 19, 1881.

I have tried both Maltopepsyn and Hydroleine in a large number of cases and have found very great benefit from their use. Maltopepsyn is one of the best remedies of its kind that I have ever prescribed when artificial aid is required for digestion. Hydroleine I have found to be one of the best, if not *the* best of its class. It is readily taken, is easily assimilated, does not produce nausea or disgust, and nourishes the body to a very marked degree. In all wasting diseases I have found it to be most satisfactory. I would strongly recommend both of these preparations to my professional brethren.

JAS. H. RICHARDSON, M.D.,
M.R.C.S., England.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have given a very fair trial to your preparations Maltopepsyn and Hydroleine. I found Hydroleine invaluable in all wasting diseases, where cod liver oil and other tonics are generally employed, and especially in treating some cases of chronic diseases of the skin.

Maltopepsyn has been used successfully in two cases of Dyspepsia.

Yours truly,

GASPARD ARCHAMBAULT, M.D.,
Physician to the Hotel Dieu and Professor of
Dermatology at the Medical and Surgical
School.

MONTREAL, Sept. 12, 1881.

Dear Sir.—I think I have employed Hydroleine since its first introduction here, and it has given far more satisfaction in my hands than any other Cod Liver Oil preparation, in cases of emaciation with cough and threatened consumption its use has invariably been followed by benefit and in many cases results have been truly remarkable. Increase in weight, improved secretions and better spirits usually follows its proper administration. In chronic diarrhœa I have found it very serviceable and for many convalescents it is invaluable.

Yours truly, W. B. BURLAND, M.D.

MONTREAL, Sept. 28, 1881.

Dear Sir.—I have used Hydroleine very freely and find it a very good tonic in all wasting diseases, principally those of the pulmonary organs.

Yours truly,

P. G. MOUNT, M.D.

Physician to the Reformatory Jail, Montreal.

690 Dorchester Street, MONTREAL, Sep. 29, 1881.

Sir.—I have much pleasure in adding my own to the mass of testimony you have already acquired in favor of Hydroleine, with the results of which I have never been disappointed. Its administration has frequently been attended with an increase in the patient's weight far out of proportion to the quantity of oil taken.

Yours truly,

A. LAPHORN SMITH, M.D.,
M.R.C.S., England, F.O.S. Lond.,
Physician Montreal Dispensary.

531 Wellington Street, MONTREAL, Sep. 19, 1881.

Dear Sir.—What I have seen of Hydroleine is certainly to its advantage. In the first place you do not, as is done to my knowledge in other preparations, endeavor to cover up deficiencies of the oil by adding strong aromatic oils to the mixture, and again, I consider the formula more likely to secure a finer emulsion by reducing the size of the globules than is possible under other methods.

Yours truly,

CASEY A. WOOD, M.D.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have much pleasure in testifying to the excellence of your Maltopepsyn in cases of indigestion and the diarrhœa and the vomiting of children. Beyond question it is the most successful remedy we possess in the above class of cases, particularly so in young children, doing away entirely with the very objectionable habit of administering very powerful astringents, including opium. Your preparation in these cases is prompt in its action and above all harmless.

Yours very truly,

JOHN T. FINNIE, M.D.

MONTREAL, Sept. 19, 1881.

Dear Sir.—Having occasion to prescribe Maltopepsyn often, it is with the greatest pleasure that I inform you of its entire satisfaction to the relief and cure of all those troubles which accompany dyspepsia, gastralgia, pyrosis and flatulency; it has also cured costiveness. In all these complaints I am well pleased with the use of this wonderful remedy.

Yours very truly,

J. C. DANSEREAU, M.D.

126 Bleury St., MONTREAL, Sept. 12, 1881.

Dear Sir.—I have used Maltopepsyn in a great number of cases with beneficial results and think that it is a very valuable preparation.

Yours truly,

R. A. KENNEDY, M.D.

NEW DURHAM, ONT, Oct. 1, 1881.

Dear Sir.—I prescribed Hydroleine to a patient afflicted with tuberculosis. She is wonderfully emaciated; nevertheless, from the use of the one bottle she has gained 1½ lbs., her cough has become less frequent, and she expressed a great desire to continue the use of the remedy. I write you for 4 (four) bottles to be sent immediately.

Yours very respectfully,

A. McCURDY, M.D.

UPPER BEDFORD, QUE., Sept. 28, 1881.

Dear Sir.—For the past 12 months I have used Hydroleine (Hydrated Oil) in all my cases presenting either a scrofulous or tubercular diathesis, and have found it answered better than any other preparation of cod liver oil. Notably with children (of all ages) do I find its *particular* value.

In suitable cases your Maltopepsyn has never failed me, and in certain cases of long standing dyspepsia, its use I found indispensable.

Yours truly,

DAVID A. HART, M.D.

Elliott, M.D., Health Officer of Pontiac, relative to scarlet fever; and one from Foster Pratt, M.D., Health Officer of Kalamazoo, relative to small-pox. The Secretary also read a *résumé* of work of other State Boards of Health, and it showed that typhoid fever was very widely prevalent, that small-pox was very prevalent in the northern and north-western states, and that intermittent fever was present in Conn., Mass., and Rhode Island.

The next regular quarterly meeting of the Board will be held on the 11th of April. The Sanitary Convention was held at Ann Arbor on the 28th of February.

Selected Articles.

ABSCESS OF THE LIVER.

The following interesting clinic by Professor Whittaker, is taken from the *Lancet and Clin. ic*, Cincinnati.

Dr. Kelly, the resident physician, who has had immediate charge of the case will read us the history of it:—Mrs. G., æt. 32, married for two years; has had one child, which died about five months ago, aged nine months. Family history good. Personal history, so far as patient knows, is also good. Indeed, judging from the history, the patient has enjoyed unusually good health. Parturition and puerperium were perfectly normal. The patient has not menstruated for nearly two years. After the death of her child, about five months ago, she began to lose flesh and strength. This has continued progressively until she is now bed-ridden. She has a slight cough and complains of shortness of breath. Even when quietly resting in bed, she must retain a semi-recumbent posture in order to breathe easily and freely. Her appetite is fair, her bowels regular. She is very much emaciated. The abdomen at the upper portion is abnormally distended, as also at the lower portion. Palpation shows the enlargement at the upper portion to depend upon a solid body in the epigastrium and left hypochondrium. The enlargement below depends upon an accumulation of serum. There is here decided fluctuation. Above there is found a solid body jutting out from the free border of the ribs on the left side, and downwards nearly to a level with the umbilicus. The epigastrium is filled by a smooth round body which is exquisitely tender to the touch. Percussion gives fixed dulness over the hepatic region, extending from a line above the nipple in the epigastric region downward. The dulness in the lower abdomen varies with the position of the patient. The heart and lungs are normal. Pulse 112; temperature 99.5°. Urine normal except in excess of urates.

I think it must be apparent to you all that we have to deal here with some disease of the liver, which is most pronounced in its left lobe. So far as the history of the case is concerned, we have little or nothing to guide us. The most searching inquiries of the resident physician give us no antecedent disease. Dr. Kelly has taken pains to discover, if possible, some previous malady, because he knows as you know that the liver is seldom the seat of primary malady. Although it is such a big organ and has such a multitude of functions to perform, disease seldom begins in it. And while this is true of its acute, it is much more remarkably true of its chronic affections. I appeal to the history of the degenerations, the syphilitic, the fatty, the amyloid, the malarial, common conditions attended with enlargement of the liver, and you will remember of all these affections that they show their first expressions, or their first causes elsewhere. Hence the extreme importance of a history in a disease, real or suspected, of the liver.

Now, the only possible prodrome in the history of this case is childbed, a perfectly physiological condition, but we fix upon it nevertheless as the only clue we have to explain the abnormal state of the liver. So far as the statements of the patient are concerned they mislead rather than lead us to a comprehension of her conditions. For this patient came to the house to-day with a statement that she had "water on the chest." But upon examination there was found nothing wrong with the lungs; nothing wrong with the heart. Upon further examination, however, there was found something wrong in the region of the liver. There was this protrusion in the epigastrium; a round smooth protrusion, indicating an enlargement of the left lobe of the liver. There has been in the history of this case some slight œdema of the feet, but that has disappeared. You might think from this much of the history that we had to deal with a case of amyloid degeneration. On this supposition, the first inquiry you would make would be for phthisis, because one-half of all the cases of amyloid degeneration, are due to phthisis. Then you would inquire for a bone disease, for necrosis of the bone is one of the most frequent causes of it. Next you would inquire for syphilis; none of which conditions have pre-existed here. Given a tumor of smooth outline over the liver, with œdema of legs and you might naturally suppose, I say, that you had amyloid disease but you would not accept such a view unless you could find the cause of it.

Well, I came to the bedside of this patient just before I came to you, rather prejudiced in the belief that I had to deal with a case of amyloid degeneration, probably from one of the causes mentioned, possibly from malarial cause, and possibly from no discoverable cause, as such cases

do unquestionably exist. But, it must be apparent to you upon very superficial examination that there is a decided protrusion of the epigastrium; this is as you see a globular enlargement of the left lobe of the liver, and when I now put my hand upon the hepatic region, four, perhaps five, inches from the margin of the ribs, I find this hard mass, which I of course recognize to be the liver. It reaches down to two and a half inches above the umbilicus. As I trace around this tumor, I can distinguish a sulcus which divides the right lobe from the left. The left lobe reaches down to a line near midway between the ensiform cartilage and the umbilicus. The right lobe reaches over to the left to the parasternal line. The tumor has distinct edges, but it has a doughy feel. It causes pain to the patient when I make pressure upon it. Now, if we go down lower, in the abdominal cavity, you observe that the umbilicus is protruded; that the hypogastrium is also raised. I find in the iliac regions also a doughy feel which is due to the accumulation of fluid; that is, I get a distinct fluctuation.

We have here now an enlargement of the liver with a previous history of oedema of the feet. There is with this also, a considerable degree of emaciation, best shown about the chest, where the ribs are prominent and the intercostal spaces are well marked. There is in addition to this a considerable elevation of the temperature, to about 101° ; the pulse is also somewhat rapid, running 105 per minute. What, then, might this enlargement of the liver be? Well, I said I came to this case rather prejudiced in favor of amyloid degeneration. For while it is the rule that amyloid degeneration is preceded by a history of suppuration, yet we do have it occurring where there is no such history. As a rule we have a suppuration of three or four months duration. There is another fact which we know clinically, that amyloid degeneration does not affect any one organ, but several organs. The liver, spleen, kidneys and intestines are the organs of predilection. There is perhaps no affection which enlarges the liver to such a degree as amyloid change. But an amyloid liver, while it gives a doughy feel and decided resistance does not give tenderness on pressure. We ought also to find some evidence of amyloid change in the kidneys, but the urine is normal. Now we find that this woman has just a few months ago gone through with puerperium. Could there have been any suppuration during that period? There is no evidence of it, so far as we can see. Since then we have no history of suppuration in this case, and no manifestation of its change elsewhere, we are forced to exclude amyloid degeneration. It could not be a fatty degeneration, for this is a disease which comes on in high-livers or after suppuration, especially in the lungs. It is rare to cut into the liver of one who has died of phthisis

without finding evidence of fatty change. But a fatty liver is not tender to the touch. It is in no way attended with manifestations of febrile excitement. Moreover there is no history of phthisis here, for the organs of the chest have been pronounced normal. No one would for a moment think that this patient has cancer of the liver. Here is a patient who was perfectly well before parturition, was confined, nursed her child and got up perfectly well and remained so for several months before this affection of the liver came on. And, moreover, a carcinoma of the liver does not enlarge it uniformly, but there are nodules giving it an irregular outline. We should have also a discoloration of the surface. Then the patient is too young to be subject to this disease. Cancer of the liver, too, is nearly always a secondary product, but there have been no primary manifestations here. Of course, we exclude echinococcus. There could be no echinococcus here for we would then feel large, irregular, nodular masses, in which we might detect fluctuation. Specific disease we exclude because it is not, as a rule, attended with any enlargement of the organ, but, on the contrary, usually with contraction. Could it be cirrhosis? You know this disease enlarges the liver in its first stages. But cirrhosis comes on, as a rule, from alcoholism, and there has been no such history in this case. Sometimes there is no history of alcoholism. Could this then be one of those rare cases in which cirrhosis comes on after the puerperal bed? It has come on too rapidly for such a view. There has been no bile in the urine—no excess of urates; the urine is perfectly clear.

Well, now, it seems to me that we have examined nearly all the diseases of the liver except *abscess*. We have come to this conclusion by exclusion, and we will come to it, also, by direct examination. We have the enlargement, the elevation of temperature, and, what we may lay especial stress upon, the tenderness. But how shall we verify it to be an abscess? The abscess is usually found in the right lobe of the liver; but here the main amount of tumefaction is in the left lobe. It does not enlarge the liver in all its dimensions. It usually works some way to the surface. We know that an abscess of the liver sometimes discharges itself into the pleural cavity, and occasionally into the peritoneal sac, or upon the surface. Now, how can we make the diagnosis absolutely certain without the presence of pus? By aspiration. Well, I took the precaution just before I came in to insert my hypodermic needle, and I drew out this syringeful of the yellowish fluid you see. No other evidence could give us proof like that. In old times it used to be a difficult thing to diagnose an abscess of the liver. Now, when in doubt, we introduce the needle of the hypodermic syringe carried with us. No language could portray so distinctly what is the matter with this

patient as that spoken by this little instrument. It takes but five seconds to let it speak. By this means we could have recognized an accumulation of fluid of any kind: blood, serum, echinococcus fluid; and, having our diagnosis, know the treatment at once. Chapters upon chapters, written about the diagnosis of abscess of the liver we skip altogether, because the diagnosis is so easy by means of aspiration.

Now we know what is the matter in this case absolutely, and we know just what to do for it. And I would do it here before you but the patient objects. That objection may prove fatal to the patient. The abscess may break into the peritoneal cavity and set up a fatal inflammation before morning. Now pus, wherever it is located must be evacuated—*ubi pus, ibi incisio*—wherever there is pus there must be an incision. The pus must, of course, be discharged. If let alone it will burst either into the pleural cavity, the peritoneal cavity, the bronchii, the pericardium, or upon the surface. If it burst in the lungs or upon the surface, the patient may come through all right; but if the adhesive inflammation between the liver and the abdominal walls be not sufficient, and there exists a mere crevice between the liver and the walls, the pus will take that coarse, and kill the patient with peritonitis. In old times they cut down upon these abscesses—that is, they burned down through the abdominal wall so as to cause an adhesive inflammation, then cut through. Now, however, we aspirate it, and draw off the fluid almost without causing pain. Well, the cavity may fill up again. Suppose it does; we will then wash it out frequently, and, if necessary, inject some irritating material to prevent the reformation of the pus. I use the compound solution of iodine. There is not much color to this fluid, and it looks as if the cavity was filled with clear and laudable pus. This makes it all the more favorable for the patient, though the sac will fill again. The abscess is no doubt surrounded by a thick wall of pyogenic membrane without anfractuositities.

Now, suppose we had not found the depot of pus; still there would be no harm done. The little operation causes no more pain than a hypodermic injection. I introduced this needle before I came in without the patient feeling it at all. But because you did not find the pus you could not be sure there was no abscess. I once aspirated a man in this amphitheatre five times and failed to get any pus. The man died, and upon *post mortem* examination, I found that the needle of the aspirator had once gone into the pyogenic membrane within a line of the pus cavity. As a rule, you will hit it; but you will, as a rule, if you aspirate five times and get no pus, be correct in your conclusion that there is no abscess. You also see how little time there is to waste in a case of this kind,

and how important it is to make a diagnosis; and yet how often this is not done. I have seen a patient with a pleurisy, who was treated months for other diseases, where you could recognize an accumulation of fluid in the chest cavity by simply putting your hand on the chest; and noticing the absence of all fremitus, I put in the hypodermic needle, drew it out full of fluid and made a diagnosis in ten seconds; so can any of you. I have, I suppose, aspirated five abscesses of the liver in this amphitheatre. There is very little danger in aspiration, and yet I once met with an accident right here: A thrombus suddenly formed and the patient died on the table. That was not a case of abscess of the liver, however, but of the lungs. Our pathologist, Dr. Walker, tells me of two fatal cases he knows of where the pus trickled out from the wound of aspiration and produced a fatal peritonitis. Such an accident could only happen through the use of too large a tube. You can pump out thick matter through a very fine tube.

CARCINOMA OF THE BREAST.

By DR. S. W. GROSS, Philadelphia. (New York Academy of Medicine, Jan. 19th, 1882. *Medical Record* report).

The conviction is steadily gaining ground that carcinoma of the breast is curable, and that it is primarily a local affection and not an expression of constitutional taint, discrasia or diathesis.

In favor of these views are Virchow, Billroth, Fischer, Esmarch, Nussbaum, Volkmann, Kocher, Hutchinson, Gull and others in Europe; and Parker, Gross, Peters and others in this country.

In connection with this subject three important questions arise:

1. Does the knife prevent local dissemination of the disease?
2. Does the knife prevent lymphatic involvement?
3. Does the knife prevent the development of metastatic tumors?

First. Does surgical intervention prevent invasion of adjacent tissues? This question must be answered in the affirmative in a certain proportion of cases. The conclusion of the reader was that extirpation precludes extension to the skin and surrounding parts in *ten* per cent. of all cases.

Second. Does surgical interference with the knife prevent involvement of lymphatic glands? It certainly does.

Third. In attempting to answer this question—Does the knife prevent the development of metastatic tumors—it must be borne in mind that such tumors are not always developed.

After analyzing several collections of cases, Dr. Gross reached the conclusion that operation prevented implication of internal organs in 32.30 out of every 100 cases.

Again, life may be prolonged and permanent cure may be effected by surgical intervention. Extirpation adds one year to life. Special attention was directed to Volkmann's statement that the result might be regarded as final if the patient survives over *three* years after the *last* operation. The author of the paper then presented an analysis of 524 cases, in which 1 in 9.19 fulfilled these requirements. Subjecting the 524 cases to Paget's severe test—that the patient should live more than ten years from the beginning of the disease, or that the disease should be stationary—he found that 1 in 5.7 fulfilled these requirements. The average duration after operation in all these cases, was from seven to ten months. An analysis of 57 cases cured was then given, and the conclusion reached that recurrent tumors should be freely extirpated as soon as they appear.

The absence of glandular implication does not afford absolute guaranty that secondary deposits are not in the viscera.

Dr. Gross makes it a rule to amputate the entire mamma, search for any outlying nodules, dissect away the fascia overlying the pectoral muscle, open the axilla, and remove any glands which have escaped observation previous to interference. Heretofore, one cure out of every nine and one-fifth cases has been the most expected from early radical measures; but there was reason to believe that the ratio of cure would be increased. Partial operations should be *discarded*, for they are more fatal than removal of the entire breast, and they hold out but little prospect of permanent recovery. He believed that in the future the mortality from radical procedures would not reach ten per cent.

The conclusions reached by the author of the paper were substantially as follows:

1. That surgical intervention in carcinoma of the breast tends to retard the progress of the disease by preventing local dissemination, implication of associated lymphatic glands, and the development of visceral tumors.

2. That local reproductions do not militate against permanent recovery, provided they are thoroughly and early excised as soon as they appear, and that lymphatic involvement does not forbid operation, since, in fact, glands were removed in more than one-third of the examples of final cure.

3. That the subjects are, almost without exception, saved from local and general reproduction, if *three* years have elapsed after the last operation.

4. That the risk from operations is outweighed by benefits which accrue from them, since they not only add twelve months to the life of the patient, but also cure one-half as many patients as they destroy.

5. That all carcinomas of the breast—if there is no evidence of metastatic tumors, and if thorough removal is practicable—should be dealt with as

early as possible by amputating the entire mamma, integument and all, dissecting away all the subjacent fascia, opening the axilla, with the view to exploration and removal of all the glands not palpable prior to interference.

An interesting discussion followed. Dr. Gross, in closing the discussion, said that the 17.87 per cent. of the mortality from the immediate effects of interference, was accounted for, to a certain extent, by the mode in which the axillary wound was treated. Instead of veins being ligated, the wound was stuffed with material which caused the secretions to be pent up, and pyæmia and septicæmia, and other bad accidents, followed. The operations which were followed by such a rate of mortality were not performed in English and American hospitals, but for the most part in Germany, where the mortality had been notoriously high.

He had removed the breast in seventy-two cases; seventeen by the thorough operation, fifty-five by the common operation, and he had lost only two patients, or less than 1.5 per cent. At most, the mortality should not reach five per cent. He thought that surgeons should expect better results than preventing the extension of the disease in 10.87 per cent. of all cases of cancer of the breast; that was the limit obtained by *all kinds* of operations. But he had presented the more thorough procedure, believing that if it was more uniformly practiced, better results than those already given could be obtained.

Recurrence of carcinoma after the ordinary operation was the rule, and generally in the line of the cicatrix. It was his point, and he regarded it as the most important. Why do we leave anything in which the disease may recur? To rid a field of large weeds, and leave the little ones standing, did not cleanse it; the farmer must remove the small weeds as well as the large, if he would not have his crops destroyed. The thorough operation was not especially serious. He had lost only one patient out of the seventeen upon whom he had performed it, and in that case the patient was a bad subject, enormously fat, and she died on the *third* day, from causes unknown. The disease recurs in the skin—if not in the skin, in the subcutaneous connective tissue and fat. Hence, why leave these tissues behind? His method of procedure is as follows: First, palpate the entire mammary region; feel for lobules outside of the gland in the axilla, above and below the clavicle, and then, instead of making an elliptical incision, embracing the nipple and a small portion of skin, remove the breast by a circular incision, remove the pectoral fascia, then secure blood-vessels, then prolong the incision into the axilla, which is to be explored with the finger, thoroughly, and all glands in the least affected removed; ligate with catgut each vein which goes into the axillary veins and all the arteries; make a clean and complete dissection of the axilla, and

then, after all hemorrhage has been staunched with hot water, a drainage-tube is inserted, and the lips of the wound approximated as closely as possible by stitches, introduced one and one-half or two inches from the edges, and the remaining space left to heal by granulation. In some cases it will be possible to approximate the edges of the wound accurately. He believed that carcinoma is, primarily, a local disease, and the sooner such an operation, for its radical removal, was performed, the better.

ON TAPPING THE BLADDER THROUGH THE PROSTATE.

BY REGINALD HARRISON, F.R.C.S., LIVERPOOL.

Tapping the bladder is an operation which is not often necessary; I believe it may occasionally be resorted to even when a catheter can be passed. Assuming it to be required, how is it to be done?

Tapping with the aspirator-needle above the pubes is a safe proceeding, and for affording temporary relief is to be recommended. A surgeon who finds himself in difficulties with a distended bladder, a large prostate, and false passages, is likely to do less harm with the needle than with the catheter, and is sure to give relief. Taking off the tension by withdrawing the urine generally permits the instrument to pass on the next trial. This method, however, can only be used for temporary purposes.

Tapping the bladder above the pubes with a trocar for the purpose of establishing a more or less permanent drain is very much like opening an abscess at its least dependent spot. Urine ascends the canula against gravity, and the products of inflammation of the bladder, usually present in some degree, remain behind in the pouch undischarged. Tapping through the rectum requires the retention of the canula in the intestine, and is thus an obstacle to defecation. Forcing the end of the catheter through the enlarged prostate is an unsurgical proceeding not to be entertained. Tapping the membranous urethra leaves us in the position of having the obstructing prostate behind the opening. There is a point in the wall of the bladder unconnected with peritoneum through which a trocar and canula may safely be passed. I refer to the prostate gland, which in old men, where paracentesis is more frequently required, often affords a considerable area for the operation. I will illustrate this method by the following case, only premising that over twelve months ago I recognized its propriety, and tested it on the dead subject. I then had the instrument made for the purpose; but though having considerable opportunity for dealing with retention of urine under all circumstances it was not till quite recently that a case in point presented itself. I mention this as explaining how I came to be pre-

pared instrumentally for doing that which I will briefly describe:

N. D., aged eighty-four, was admitted to the Liverpool Royal Infirmary at 2 a.m. on 4th of November, 1881. My house-surgeon, Mr. Laimbeer, found him bleeding from attempted catheterism with a large prostate, and a distended bladder. Recognizing the urgency of the case, and finding catheterism impracticable, he emptied the bladder with the aspirator above the pubes. I saw the patient a few hours afterward, and found that he had not passed urine since, and that no catheter could be introduced. His tongue was brown, and he much exhausted. Later on I again visited him, when the bladder had become fully distended. I then had him placed under ether, and succeeded in passing a gum-elastic prostatic catheter. Beyond demonstrating that the difficulty had been overcome I declined letting any more urine be drawn off for a reason arising out of recognizing that either the catheter must be retained or re-introduced when required; neither of which proceedings I was disposed to recommend.

Retaining a catheter in the bladder of an old man somewhat childish, and disposed to remove any appliance if not closely watched, is not easy, and when it is done it often ends with death from cystitis, pyelitis, and exhaustion. This was a case where, in my judgment, it was wisest to establish a permanent drain; and to do this in the manner on which I had determined required a tense and not a flaccid bladder. Taking a trocar which had been made for the purpose, with a silver canula I introduced it in the median line of the perineum, three quarters of an inch in front of the anus, and pushed it steadily through the prostate into the bladder, at the same time retaining my left index finger in the rectum for a guide. On withdrawing the trocar a large quantity of ammoniacal urine escaped. The canula, being provided with a shield, was secured in its place by tapes much in the same way as a tracheotomy-tube. A piece of india-rubber tubing was attached to the portion of canula which projected beyond the shield, and conveyed the urine into a vessel placed at the side of the bed. The urine continued to dribble through this tubing. The patient was at once made comfortable by this arrangement, and in forty-eight hours he was up, sitting in an easy-chair—an important matter with old persons. To permit of this the rubber tubing is shortened during the daytime, the end of it being tucked through a light abdominal belt, where it is compressed by a small pair of bulldog forceps, which are removed when the patient desires to pass urine. He is quite as well as most men of eighty-four years of age are. He gets up daily, takes his food, and sleeps comfortably, either on his back or his side, without any narcotic, and is quite free from any urinary inconvenience other than wearing his tube. During

the night his sleep is not broken by calls to micturate or pass catheters, as his urine runs off by the tubing as it is excreted; while in the day-time when he is up and about his act of micturition practically resolves itself into something equivalent to the turning of a tap. His urine, which had been fetid and ammoniacal, is now nearly normal, the bladder being readily washed out by applying a syringe to the canula twice a day. On two or three occasions the canula has accidentally slipped out while the tapes were being changed, but has been readily replaced by the nurse. The somewhat enthusiastic manner in which the patient compares his present with his past condition can not be passed by entirely unnoticed.

The operation was devised much on the same lines I endeavor to take in commencing my lithotomy incision—namely, the selecting of a point in the perineum which endangers no vessel of importance. My object in planning the operation was to obtain what I can best describe as a short low-level urethra, adapted to the altered relations of the bladder to the prostate when the latter becomes enlarged, for the purpose of securing the most complete drainage. I should add that since the tapping, as far as we are aware, the patient has only passed a few drops of urine by the urethra.

—*British Medical Journal.*

SPONGE GRAFTING.—In the *Edinburgh Medical Journal*, for November, Mr. D. J. Hamilton, Pathologist to the Edinburgh Royal Infirmary, has a long and very interesting article on what he has named "Sponge-grafting." By means of a piece of antiseptic sponge he has been able to fill up cavities with granulating tissue, and to cause large ulcers to heal, which would not fill up or heal over by any other method. The first experiment related is the one made upon a sloughing ulcer of the leg, which was circular in shape, five inches in diameter, and from one-half to three-quarters of an inch in depth. The question of amputation had been raised. On August 3rd, however, the wound was filled with one large piece and several smaller pieces of antiseptically prepared sponge. The sponge fitted the wound accurately, and was inserted under the undermined edges. The dressing consisted of green, protective, carbolized lint, and dry boracic lint and bandage. By August 8th, the wound appeared to have shrunk a little, and the thin edge of the sponge felt firm, as if filling up with some substance, and if the surface was pricked it bled freely. The edges of the sponge appeared to be dissolving. On November 29th there was only a small portion to be seen on the surface. As soon as the sponge became vascular, epithelium spread rapidly over it. Mr. Hamilton says: "This experiment showed me that if sponge be placed over a granulatory surface, its interstices will, in course of time, become filled

with blood-vessels and cicatricial tissue, just as in the case of a blood-clot, and, ultimately that the whole of the sponge will disappear in the wound, leaving an organized mass of new tissue in its place. It further showed that even when the wound continues in a putrescent condition, organization will still go on. In the case of the blood-clot, putrefaction tends to destroy it; in that of the sponge, its texture being more resistant, it does not seem to make much difference." Several other experiments are given, showing the adaptability of sponge for filling up a vacuity such as that which is left after the removal of a tumor. The article then closes with some suggestions as to the applications of sponge-grafting:

"Having once recognized the principle that a porous body may become vascularized, and be the medium for the construction of new tissue, the application of the method to various purposes naturally suggests itself. In applying any porous body with a view to this organization, certain points must always be kept in mind. The porosity of the body must be such that all the canals freely communicate. Sponge is exquisitely suited for the purpose on account of the free anastomosis between its channels, but many other substances might be utilized in the same way. I have of late thought that charcoal or calcined bone might be employed in certain cases. For one purpose, at least, such a solid framework would be useful. Where it is desired to prevent contraction of the newly formed tissue when it cicatrizes, where it is of moment to retain the newly formed tissue of its original bulk, then a solid framework must be employed. A solid framework will, I feel sure, organize just as a sponge would, and will have the special quality of preventing cicatricial shrivelling. When once incorporated with the tissue it will not cause any more irritation than the calcareous matter of a bone does. A dead body of this kind is not of itself an irritant. It is the injurious application of it, or the septic matter which it may introduce, which gives rise to the mischief. Such a solid framework, it strikes me, would be particularly useful for forming new bone. One of the great dangers of a simple periosteal detachment operation, is that the future bone is not sufficiently bulky and strong. By supplying a solid framework of this kind we would avoid this, and the formation of bone would proceed within it just as well as in the spaces of cartilage or the meshes of a fibrous tissue."

Mr. Hamilton stated some years ago that granulations are not formed of new vessels, but that on account of the removal of the skin the superficial capillaries are, by the propelling action of the heart, thrown upwards. If there is a blood-clot in the wound, it acts as a mechanical support for these capillaries, which are pushed into it from all sides. Believing, then, that the blood-clot was acting

mechanically, he determined to substitute some dead, porous, animal material, and accidentally hit upon sponge. This he has found to act admirably. Thus, another important advance has been made in the dressing of wounds, and we expect that it will be found to be very generally applicable, especially when there is a cavity to be filled, or when it is important to prevent contraction from cicatrization.—*Western Lancet*.

FRENCH TREATMENT OF ITCH.—At present itch is cured in one hour and a half (at St. Louis Hospital). The first half-hour, the patient, absolutely nude, rubs himself from head, or rather neck, to foot, with soft soap. The second half-hour he is put into a tepid bath, where he continues the soft soap frictions. The third half-hour he rubs his body with Helmerich's sulpho-alkaline ointment. He puts on his clothes without washing off the ointment, so as to keep it in contact with the surface for twenty-four hours. While the patient is treating himself, his clothes are purified in a specially constructed stove at a temperature of 120°, and exposed to sulphur vapour. Four thousand itch patients are treated here (St. Louis) annually. The hospital treatment is a rough one and sometimes causes attacks of eczema. It may be mitigated thus: toilet soap is substituted for soft soap, and Hardy's modification of Helmerich's ointment used—lard 100 parts; sulphur 16 parts; bicarbonate of potash 8 parts, by weight. The patient should have his sheets and all under-linen changed immediately.—*Medical Times, from Gaz. de Hopit.*

THE OPERATIVE FIXATION OF FLOATING KIDNEYS.—Considering that the extirpation of the kidney is itself a serious operation, and that, moreover, by the removal of one kidney an increased function is thrown on the other possibly defective kidney, surgeons will welcome the new method recommended by Hahn (*Centralb für Chir*, 1881, No. 29). He has already practised it in two cases of floating kidney, the right in both cases), completely relieving all symptoms in one case, and greatly alleviating the other, where the left kidney was also slightly movable. The patient lying on his left side, a vertical incision is made along the outer edge of the erector spinæ from the twelfth rib to the crest of the ilium, dividing the latissimus dorsi and quadratus lumborum muscles. The kidney, in its fatty capsule, is then pressed from the abdominal side into the wound, and there fixed with six or eight catgut sutures. Both cases recovered without a bad symptom. Since, in both cases, the kidney became after a time again slightly movable, the operator recommends that the fatty capsule should be opened, separated from the kidney, and firmly sutured into the wound, while, also, the kidney should be fixed as low down as it can possibly be drawn.—*London Medical Record*, February, 1882.

THE DOCTOR HIS OWN PHOTOGRAPHER.—The *Medical News* (Philadelphia) calls attention to a recent invention by means of which photographs may be made by the medical man. "Medical men very frequently want photographs in cases of injury, deformity, tumors, etc., but the trouble and expense have been serious bars to obtaining them; and many patients, too, cannot go to the photographer. Drawings are often even more expensive, and labour under the disadvantage of possible inexactness. Recently, however, the introduction of the 'dry plate' process has so simplified the method, avoided the former dangers, and reduced the expense, that any one of ordinary intelligence and means can now take all the photographs he wants at a moment's notice. At the Cincinnati meeting of the American Association for the Advancement of Science, last August, Mr. Walker, of Rochester, N.Y., showed a 'pocket camera,' which, according to Prof. Lattimore, supplies every want of the inexperienced amateur. Its weight is only two pounds. 'Dry-plate outfits' are now to be had at a cost of \$10 and upward, which are excellent. Provided with one of these instruments, the doctor would always be prepared to photograph any case he desires, at his office or in the sick room. Our hospitals, especially, should be provided with such an outfit, so that cases and specimens could be photographed at any time, even by a resident. Our microscopists would also find it exceedingly useful to make permanent many a transient preparation not suitable for preservation."

CATHETERISM OF THE TRACHEA IN CROUP.—A correspondent writes (*British Medical Journal*), that he was called to a girl 2½ years old, for croup. It was evident by the pulse, which was about 150, and almost imperceptible, that unless some relief could be given, the end was not far off. The face gradually became pale, and wore a distressed expression, and the lips were of a livid blue color. As the mother objected to tracheotomy, and as emetics, hot baths, and the ordinary routine treatment, had been previously tried, I introduced a large (No. 12) gum-elastic catheter into the trachea, with less difficulty than I anticipated—having first gagged the child's mouth with a cork, for the want of something better, and depressed the tongue with a spoon. After a severe paroxysm, she succeeded in getting a pretty good breath, and the next expiration was followed by the ejection of muco-purulent *débris* and sticky phlegm through the tube. In about ten minutes these convulsive efforts ceased—the child, in the meantime, getting a good amount of air into her lungs. In half an hour her face was flushed, but had lost its lividity, and the breathing was fairly comfortable. The tube was retained by tape tied round the child's neck, and was removed twenty-four hours after its insertion, when the temperature had fallen to 100°

Fahr. and the pulse to 110. Five days later she was running about the house, not much the worse for her dangerous illness. I observed hardly any difficulty in swallowing liquids after the first two or three attempts, when the tube had been introduced.—*Med. and Surg. Reporter.*

IODOFORM IN THE TREATMENT OF DISEASES OF THE SKIN.—Mr. Fraser has obtained very favorable results from the use of iodoform in various diseases of the skin. It may be readily employed in the form of an ointment of any required strength, mixed either with lard or vaseline. The strength of the ointment made use of has ranged usually from ten to thirty grains of iodoform to the ounce of cerate, but double this quantity can be applied. It has proved a most useful remedy in healing local eczematous eruptions occurring in strumous children and young people, as well as in cases of impetigo. Mr. Frazer also directs attention to the properties it possesses in curing porrigo decalvans. The best results he has as yet attained have followed the application of vesicating collodion over the affected spot and for a short distance around it. Previous to this it is well to epilate all diseased hairs over the spot, and when the blister is healing the ointment of iodoform should be applied night and morning, or oftener; by this treatment the hair soon reappears in a healthy condition.—*British Medical Journal.*

GALVANO-PUNCTURE IN AORTIC ANEURISM.—Mr. Richard Cannon reports the case of an aortic aneurism which had almost reached the point of rupture, the skin being reddened and very thin over the tumor, which was cured by the insertion of two needles connected with twelve Stohrer cells. It is stated that when the needles were withdrawn no current was to be detected, so the favorable results may with equal probability be attributed to the mere presence of the needles or to the electrolytic action. The needles remained in the tumor only twenty minutes; at the end of ten days the tumor, which had only been the size of a walnut, flattened down to the chest walls, pulsation and redness had disappeared, and there was no pain or cough. Iodide of potassium was administered internally throughout the treatment.—*Lancet.*

SOLIDIFIED WINE AND BRANDY.—An Italian has invented a process for solidifying wine. From a small quantity of this extract may be obtained a bottle of generous wine of good taste and beautiful colour. The object is to victual ships and supply armies. A French chemist has found a chemical combination by which he can solidify and even crystallize brandy. The brandy in its new form looks like alum. It entirely loses its smell. The facility with which it can be transported is the main recommendation of the new invention.—*Medical News.*

NOTHING is worse than a vacillating physician whom each notion, each wish of the patient, each suggestion of nurse or family affects. Blown hither and thither by every breath, incapable of taking a broad view of the case, his treatment soon becomes as irresolute as himself, and directions and bottles accumulate with bewildering rapidity. The fewer drugs that are used the better; the greater the decision with which drugs are used the better.—*Da Costa.*

HYSTERIA.—When called to treat a young girl with a hysterical attack, there are three things which you had better do: (1) Institute at once firm pressure in the neighborhood of both ovaries. This is very apt to quiet the patient at once. (2) Administer an emetic. I have found that a woman who is well under the action of an emetic has not the opportunity to do any thing else than be thoroughly nauseated. Give a full dose of ipecac with one grain of tartar emetic. (3) And this method of controlling the spasm will often act charmingly, take a good-sized lump of ice and press it right down on the nape of the neck. This produces quiet by its powerful impression upon the whole nervous system.—*Dr. Wm. Goodell, in Clinical News.*

EARACHE.—In the course of practice, you will often be called upon to attend a case of earache. This means, pathologically speaking, acute inflammation of the membrane tympani. Now, in such a case, you may quickly subdue the inflammation, relieve the patient from the excruciating pain he is suffering, and save him, perhaps, from subsequent confirmed deafness. The treatment from which such a desirable result may be obtained is similar to that which you will find so beneficial in analogous cases of eye disease, viz., leeches behind the ear, hydrag. c. creta and belladonna powders, with warm fomentations.—*Prof. Wharton Jones, in London Lancet.*

TREATMENT OF CHRONIC ECZEMA.—Avoid the use of soap as this is irritating. Twice a day bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield in a few days if the air be excluded by the ordinary rubber cot.—*Chic. Med. Rev.*

OBLIGATORY VACCINATION of infants has just been adopted by the Swiss Government.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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TORONTO, APRIL, 1882.

This Journal has the largest circulation of any Medical Journal Canada.

REPORT OF THE REGISTRAR-GENERAL OF ONTARIO.

The total number of births, marriages and deaths registered in Ontario in 1880 was 74,897—42,312 births, 12,783 marriages, and 19,802 deaths, being an increase of 3,395; or 4.7 per cent. over the registrations in 1879. It is estimated in an appended review or decennial report that in 1880 over 90 per cent. of the marriages were registered—6.8 per 1000 of population; fully 70 per cent. of the births—22.4 per 1,000 of population; and nearly 60 per cent. of the deaths—or 10.6 per 1,000 of population; so that it appears that the proportion of deaths registered per 1,000 has nearly doubled during the last ten years, and the actual number registered has more than doubled (9,182 in 1871, and 19,802 in 1880); the registration of births have increased from 50 per cent. to 70 per cent.; and the registration of marriages from 75 per cent. to over 90 per cent. of the numbers estimated. There were 108.5 males born to each 100 females. There were registered 671 illegitimate births, an increase of 147, or 28 per cent. over the previous year. There were 407 pairs of twins, and 6 births of triplets. Of the 12,783 men married, only 129 were under the age of 20 years, while 2,698 women entered the matrimonial state before arriving at that age. In one instance an octogenarian married a young wife just out of her teens.

In the death wave for the year there were the usual two high points and two low points. The most marked feature in the wave for the year was

perhaps the low point at which it started we should say (not subsided), in January. Of the total deaths recorded in the year only 7.3 per cent. were registered in this month. In the four preceding years the average percentage for January was 8.5; and 8.3 per cent. was the lowest for any one of those years. The wave rose rapidly, however, through February (1880), and in March there were 618, or 42 per cent. more deaths than in January. This altitude, the highest in the year, extended into April, but in May the wave sank lower than in February, and in June fell to the lowest point in the year, being the second low point. In July it swelled up again, though not so high as in May; but in August and early in September it had nearly attained the May altitude, where it remained until the end of the year, with the exception of a slight downward curve in November. The peculiar features in the wave for the year were two: the first high point reached in March (from which the wave usually recedes a good deal in April) was maintained throughout April and did not fall until May; and the wave, having risen to its second high point in August, did not recede again during the year except slightly in November, there being an absence of the usual marked fall or low point after the summer high point. The returns show that in 1880, as in 1879, the mortality in March, and also in April, was very high, and that this was largely due to deaths from lung diseases, especially from inflammation of these organs.

In regard to the certified causes of deaths no marked improvement in diagnosis is credited to the doctors, unless it be "concealed behind the fact" (whatever that means), that there were nearly 100 less deaths attributed to old age, while there was a larger number of deaths registered of persons who lived to reach the Psalmist's allotted period of 70 years, than in the previous year. Consumption, as usual, caused about one-ninth of all the deaths. Over 33 per cent. more deaths were registered as from pneumonia than in 1879; and over one-sixth of these occurred in March. Over 43 per cent. more deaths were recorded as from diphtheria in 1880 than in 1879; over 30 per cent. more from bronchitis, and over 50 per cent. more from congestion of the lungs, than in 1879. There was a very large increase in the number of deaths from scarlet fever and measles.

Appended to the Annual Report is a Revi-

the births, marriages and deaths registered in the Province since registration came into operation, especial attention being paid to the returns for the last ten years—1871 to 1880 inclusive. This will be found more interesting to lay readers than the usual annual reports, and is well calculated to create a more general interest in the subject of registration. Of all the deaths recorded during the ten years, 1870 to 1880, excluding 1875, for which no report was issued, 47.8 per cent. were of those under 20 years of age; 17.0 per cent. were of those between 20 and 40 years of age; 12.6 per cent. were between 40 and 60 years; 7.7 per cent. between 60 and 70 years; and the remainder, 15 per cent., were of persons more than 70 years of age. The deaths from zymotic diseases as a class, as compared with the total number of deaths from all causes, show a decided decrease in the ten years, though in some of the diseases of the class—in croup and diphtheria, for instance—there was an alarming increase; in cholera infantum there was a slight increase. "As the diseases of this class for the most part prevail at times epidemically, an increase, small or great, is at any time liable to take place from the breaking out and spread of an epidemic of any one or more of them. The decrease, therefore, during so short a period does not necessarily, by any means, show the commencement of a permanently improved condition of the public health, nor that such condition will follow." In tubercular diseases there was a slight decrease also. In diseases of the nervous system there was a marked decrease, owing to the subsidence of an epidemic of cerebro-spinal meningitis, which prevailed in 1872-73, and which has been placed in this class, "but which has the characteristics of a zymotic disease." In diseases of the respiratory organs, there was an increase in the proportion of deaths registered; and in diseases of the urinary organs there was a slight increase.

As to the special diseases, there was a slight increase in the proportion of deaths from consumption; a large increase from both heart disease and cancer—20 per cent. and 33 per cent. respectively, and a slight increase from inflammation of the lungs, liver disease, kidney disease and paralysis.

In phraseology, some portions of the report, and especially the annual report are unique. Besides showing many glaring inaccuracies, it tells us about

a "heavy" death-rate and a "heavy" mortality, while any number of mortals were "attacked." There would seem to have been but few deaths and many, many "victims"; even "victims" of innocent old age and infantile debility. The 19,802 who died were doubtless a victimized lot; some of the "victims died." Bronchitis, croup and congestion of the lungs "usurped the places of dropsy, enteritis, diarrhoea and typhoid fever in the list of the ten highest causes of death." We are told some funny things, for example, that medical men have a deep and "unabiding" interest in the collection of vital statistics. Some sentences it would appear were not intended to be understood by ordinary mortals, some of "those things which no fellow can find out."

ONTARIO BOARD OF HEALTH.

The people of Ontario are to be congratulated upon the passing of an Act, during the recent session of the Legislature, establishing a "Provincial Board of Health." The measure was introduced by the Government, and carried through almost without amendment, the medical gentlemen on both sides of the House giving it their unqualified support. No one will question the utility and necessity of such a measure, and few can appreciate the value of it so highly as the members of the medical profession, who have ever shown themselves ready to further the interests of the public in the matter of sanitation. In fact, this much-needed reform has been accomplished mainly through the active exertion of the medical profession in this Province, aided by the influence of the medical press. We look upon the advent of the present measure as merely an instalment of what will ultimately become one of the most important enactments on the statute book. There is much scope for improvement and a wide field for cultivation in the important subject of public health, and the enthusiastic sanitarian will not rest until all that human skill can devise and human ingenuity invent for the prevention of the spread of disease, has been accomplished. It is much to be regretted that a larger sum had not been appropriated to this important object by the Government, but it is to be hoped that the small sum placed in the estimates will be supplemented from year to year, as the necessities of the Board may require.

The Board of Health is appointed by the Lieutenant-Governor in Council, and consists of seven members, including the Chairman and Secretary. Three are appointed for a period of two years, and the other three for a period of three years; subsequent appointments to be for a period of three years, and any retiring member is eligible for re-appointment. The chairman will receive a salary of four hundred dollars per annum, and the secretary one thousand. The services of the other members of the Board shall be honorary, and they shall be paid no per diem allowance or compensation except their travelling and other necessary expenses, when employed on the business of the Board. The meetings of the Board shall take place quarterly at Toronto, and at such other times and places as they may deem expedient. It is contemplated by the Act that the board shall keep at all times an adequate supply of vaccine matter, for the purpose of supplying at, cost price, legally qualified medical practitioners in the Province with such reasonable quantities as they may from time to time require. The Act also gives increased powers to local Boards of Health; and clause 14 provides that when the small pox or any other disease dangerous to public health, shall break out in any municipality, the health officers or Local Boards of Health, in case the municipality shall not have provided the same, shall immediately provide a temporary hospital for the reception of the sick and infected at the cost of the municipality, and such hospital shall be subject to the regulations of the health officers or local Boards of Health. Provision is also made and power given to local Boards of Health, to use all necessary means to prevent the spread of contagious diseases, by isolation, disinfection, etc., etc., and lastly, clause 20 imposes a penalty upon householders or physicians who shall refuse or neglect to give notice of the existence of any disease dangerous to public health, when the same has become known to them.

The following is the *personnel* of the Board so far as announced: Dr. Oldright, (Chairman), Drs. Covernton, Cassidy, and J. J. Hall (Homœopathist,) of Toronto, Dr. Rae, of Oshawa, and Dr. Yeomans, of Mount Forest. The secretary has not yet been appointed. Although the selection of the chairman does not meet our approval, yet as the appointment has been made, we feel that that gentle-

man should have a fair trial. It is a position that requires a thoroughly practical man, possessed of good tact and judgment, and having the entire confidence of the medical profession. A mere theorist is well enough in his way, but is entirely out of place when put forward as the governing spirit of an undertaking that requires practical talent of the highest order to make it a success. We sincerely trust that the practical qualifications of the other members of the board, will more than offset the disadvantages which might otherwise accrue from having an unpractical man at the head of affairs.

A good deal of labor in connection with the organization of local boards and other matters connected with the operation of the Act will devolve upon the Secretary, and it is to be regretted that a larger salary had not been attached to the office, so as to enable him to devote his whole time to the work. It will be difficult, we apprehend, to obtain the service of a medical man actively engaged in practice, as the duties, if properly performed, will necessarily engage much of his time, and prevent him from supplementing his income by the serious inroads his enforced absence from the city, from time to time, will make upon his practice.

ONTARIO BRANCH MEDICAL ASSOCIATION.

The first regular meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on Wednesday, Feb. 15th. The following members were present: Drs. Clarke, Collinge and Stewart, of Palmerston; Nichol, Philp, Dillabough, Burgess, and Dingman, of Listowel; Allan and Cowen, of Harriston; Yeomans, Ecroyd, and Jones, of Mount Forest; McLaren, Baird, and McArton, of Paisley; Holmes and Graham, of Brussels; Martyn, of Kincardine; Stalker, of Ripley; Mackid, of Lucknow; Clapp, of Mildmay; Hodge, of Mitchell; Gun of Durham; Holstein, of Cedarville; and Stewart, of Brucefield.

Communications were received from Drs. Henderson, of Arthur; C. E. Barnhart, of Owen Sound; Robertson, of Markdale; Hyndman, of Exeter; Sloan, of Blyth; Gillies, of Teeswater; McDonald, Bethune, and Tamblyn, of Wingham—regretting their inability to attend.

During the early part of the meeting the chair was occupied by Dr. Clarke, of Palmerston, and afterwards by Dr. Yeomans, of Mount Forest, the President.

Dr. Collinge, of Palmerston, read a very carefully prepared report of a case of gangrene which he had recently under observation. The patient was a married woman, aged 32, who, when she first came under Dr. Collinge's care, on the 29th of July, 1881, complained of a pain in the lumbar region, general weakness, and a discharge from the vagina. On examination there was found some abrasion around the os uteri, which, with the discharge, entirely disappeared in a week after the application of nitric acid. On the 4th of August she complained of numbness and loss of power in the left arm, followed in a few days by a similar condition of the right arm. She vomited frequently, became drowsy and semi-conscious. A blister to the nape of the neck was followed by the permanent disappearance of the cerebral symptoms. On the 17th of August she was suddenly seized with a violent pain in the right gluteal region, extending down the outside of the thigh. The right thigh and leg were found to be larger than the left. On the 24th of August the right great toe had a purplish hue and was painful. In a few days the color was changed to a white mottled appearance, and the gangrenous process had now involved the whole foot.

There was a line of hardness along the course of the right internal saphenous vein in the lower part of the thigh. The gangrene steadily progressed, until an oblique line of demarcation formed four inches above the ankle joint. Previous to her death, on the 28th of Sept., the gangrenous process had extended upwards to within four inches of the knee joint, and the soft tissues over the sacrum, to the extent of 5 x 3 inches, sloughed away. The great toe of the left foot was livid and painful.

The reading of this paper was followed by a discussion, in which Drs. Allan, Cowen, Burgess, Clarke, Clapp, and others took part.

Dr. Graham, of Brussels, read a paper on "Pernicious Anæmia." He gave the details of two cases which well illustrate the wonderful hæmatinic powers possessed by arsenic. The first case was that of a married woman, aged 35, who was found in the following state five weeks after her confine-

ment. There was little or no hæmorrhage during the labor. Face swollen and bloodless, mucous membranes pale; troubled frequently with diarrhoea and vomiting. Frequent pyrexial attacks. The blood was found to contain a large number of microcytes. The corpuscles presented various forms; no increase of white cells. Under quinine and iron she became rapidly worse; under arsenic she rapidly and permanently recovered. The second case is a somewhat similar one, occurring in a female aged 24, who, two weeks after confinement, presented the well-known symptoms, including the pyrexial attacks of pernicious anæmia. Arsenic was soon followed by recovery.

Dr. Stewart, of Brucefield, read a paper on "Some of the Uses of the Sphygmograph in Practical Medicine." Traces illustrative of the actions of alcohol, digitalis, nitro-glycerine, and other drugs, were shown. Traces were also shown which prove that in many cases of pneumonia, even during the first twenty-four hours, the tension of the radial artery is much lowered.

Drs. Yeomans, Burgess, Clapp and Mackid were appointed to read papers at the next meeting of the Association, which will be held in Palmerston two or three weeks after the meeting of the Ontario Medical Association.

THE RADICAL CURE OF CANCER.—Dr. Warren, of Boston, who, in October last, was delegated to receive competing essays on the subject of the radical cure of malignant disease, announces that three essays were presented. In the consideration of their merits the assistance of Dr. George B. Shattuck, editor of the *Boston Medical and Surgical Journal*, was invoked; and it has been decided that no essay is worthy of a prize.

The same subject, namely, *The Probability of the Discovery of a Cure of Malignant Disease, and the Line of Study or Experimentation likely to bring such a Cure to light*, is proposed for essays to be presented in competition not later than the first day of December, eighteen hundred and eighty-three (1883), to the above-named, who, with such assistance as he may select, will be the judge of their merits. For the best essay on the above subject a prize of one thousand dollars will be given, the right being reserved to withhold the prize in case no essay of sufficient merit be presented.

The essays must be legibly written in English, and neatly bound. Each one must bear a motto, and be accompanied by a sealed envelope bearing the same motto, and inclosing the name and address of the writer. They will all remain in the possession of the donor of the prize for the convenience of reference, and the privilege is claimed to publish the successful one, with the name of the writer. No writer, however, surrenders the privilege of retaining a copy of his essay, and publishing it. The decision concerning the merits of the essays will be made chiefly from a practical stand-point, it being the object of the donor of the prize to obtain suggestions by which a search for a cure for cancer may be instituted.

MCGILL COLLEGE CONVOCATION.—The following gentlemen received the degree of M.D.C.M. on the 3rd ult.:—Chas. O. Brown, Lawrence, P.Q.; Benj. W. Burland, Port Kent, N.Y.; Lorne Campbell, Montreal; Angus M. Cattanaich, Dalhousie Mills; O. Edmund Christie, Lachute, P.Q.; W. C. Cousins, Ottawa; Wm. J. Derby, North Plantagenet; W. T. Duncan, Granby; O. H. A. Dunlop, Pembroke, P.Q.; Rankin Dawson, B.A. (McGill), Montreal; Hugh Gale, Elora; James A. Grant, B.A. (Queen's), Ottawa; B. F. W. Hardman, Aylmer, P.Q.; R. F. Klock, Aylmer; R. K. C. McCookill, Montreal; A. R. McDonald, Trinity, Texas; F. N. McLean, Perth; W. J. Musgrove, West Winchester; Henry V. Ogden, B.A. (Trinity), St. Catharines; T. J. Pierce O'Brien, Worcester, Mass.; Henry O'Keefe, Lindsay; O. Clarendon Rutherford, M.A. (Union), Waddington, N.Y.; Alex. Shaw, Seaforth; E. W. Smith, A.B. (Yale), West Meriden, Conn.; W. E. Thompson, Harbour Grace, Nfld.; H. W. Thornton, B.A. (McGill), Montreal.

The Holmes gold medal for the best examination in primary and final branches was awarded to Robert J. B. Howard, B.A., Montreal. The prize for the best final examination was awarded to H. V. Ogden, B.A., of St. Catharines, Ont. The prize for the best primary examination was awarded to Geo. A. Graham, of Hamilton, Ont. The Sutherland gold medal was awarded to Wyatt G. Johnson, of Sherbrooke, P.Q. The Morris scholarship in physiology was awarded to Wyatt G. Johnson, of Sherbrooke, Que.

Professor's prizes—Botany, Edwin G. Wood, of

Londesboro'; for the best collection of plants, W. W. Doherty, of Kingston, N.B.; practical anatomy, the demonstrator's prize was awarded to Geo. Caruthers, of Charlottetown, P.E.I., who was closely pressed by Chas. E. Gooding, of Barbadoes.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, KINGSTON.—The following gentlemen have passed the final examination in this institution:—R. S. Anglin, Kingston; J. Denike, Belleville; A. Mondy, Almonte; H. N. Macdonald, Lake Ainslie, C.B.

The following have passed their primary examination:—C. Clancy, Wallaceburg; L. T. Davis, Kingston; G. H. McGhie, Elgin; D. C. Hickey, Kingston; R. Smith, North Williamsburg; and A. J. Grange, Napanee. Messrs. F. Kidd and W. J. Young have been appointed house surgeons, and W. G. Anglin and T. A. Moore, demonstrators of anatomy, for next year.

DEATH FROM A MIXTURE OF CHLOROFORM AND ETHER.—A death occurred recently in Lindsay from the inhalation of a mixture of chloroform and ether. The operation was for removal of the great toe for frost-bite. Drs. Burrows and Coulter performed the operation, and, at the request of the patient, administered an anæsthetic, a mixture of chloroform and ether. An examination of the patient by the medical men showed no reason why the anæsthetic should not be given. The doctors affirm that at no time during the operation was the patient thoroughly under the effects of the mixture administered, as at the conclusion of the operation his breathing was natural and conditions favorable. Suddenly he gave a gasp or sigh and a moment after expired. The usual means to bring about resuscitation were tried without avail. There was no *post mortem*.

PRESENTATION TO DR. WIDDIFIELD, M.P.P.—A very pleasing episode took place in the Local Legislature just before the prorogation of the House, in the presentation to Dr. Widdifield, M. P.P., by the members of the Legislature of a very elegant and costly service of silver in recognition of his services as Ministerial whip during the time he has been a member of the House. The testimonial consisted of seven pieces of silver, a tea-set and waiter handsomely chased. Upon the salver is beautifully engraved the following appropriate inscription:—

"Presented by the Reform members of the Legislature of Ontario to Dr. Widdifield, M.P.P., in appreciation of his valuable services and uniform courtesy as Government Whip during the past six years, March 10th, 1882."

The speaker of the House (Col. Clarke) occupied the chair, and Mr. Badgerow, member for North York, formally made the presentation. Hon. S. C. Wood, Provincial Secretary, added a few words in which he spoke of the highly satisfactory manner in which the Dr. had performed his delicate and important duties. Dr. Widdifield made a suitable reply. We congratulate the Dr. upon the high esteem in which he is held by members of both sides of the House, and many warm friends outside the Legislature.

COMPRESSED HYPODERMIC TABLETS.—We have been shown the soluble compressed tablets of morphine, atropine, strychnine, etc., prepared by Wyeth & Co., of Philadelphia, for hypodermic use. They will be found very convenient to carry about, accurate in quantity, readily soluble, and a perfect means of preserving the drugs used. They are prepared in the same way as the compressed tablets of chlorate of potash. A small tablet is dissolved in a little water, and injected whenever required.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the Board of Governors of the above-named College will be held in Montreal on the 10th of May next. Candidates for examination or the license must send their papers, accompanied with the fee, \$20, at least ten days previous to the meeting, to either of the secretaries, Dr. A. G. Belleau, Quebec, or Dr. F. W. Campbell, Montreal. The preliminary, or matriculation examination for students will take place on the 4th of May. The fee, \$10, should be sent to either of the secretaries, as above mentioned.

APPLICATION OF CHRYSOPHANIC ACID.—The use of the above valuable remedy for psoriasis and certain forms of skin disease is occasionally attended with inflammation of the skin, besides destroying the under clothing and bed-linen of the patient. Dr. Fox, of New York, (*Medical News*) recommends, in order to avoid these objectionable features, the following method of applying the remedy: A soft paste is made of chrysophanic acid and water, and smeared on the patches, the scales having been previously removed with soap and

water. As soon as the paste dries it is to be coated over with collodion. This will remain for several days, when the application may be renewed.

BROMIDE OF AMMONIUM IN WHOOPING COUGH. A writer out West (*Medical News*), who has had considerable experience in the treatment of this affection recommends bromide of ammonium, in doses of from one to four grains three or four times daily, according to the age of the child. He was led to use it from having seen it highly recommended by Dr. Kormann, and was much impressed with its influence over the disease. It is best administered in syrup, or in the form of an elixir.

A LIBERAL DONATION.—Dr. James Boyle, a native of Amherstburg, Ont., who has been practising in New York city a number of years, and who lately returned to Amherstburg, has given to the proposed free library in that town his own library, worth \$5,000, and has endowed the project with \$5,000, the interest to be used in sustaining the library. He makes a further grant of \$500 in cash towards the building fund. The library will be one of the best in the Province. We wish more of our wealthy citizens would follow the Dr.'s noble example.

BORACIC ACID IN BOILS.—The Louisville *Medical News* states that boracic acid applied to boils before or after incision will promptly arrest their development. The efficacy of this remedy can be very readily tested by applying the solution freely after incision. We very much doubt its efficacy when applied before incision.

ERGOTINE FOR NIGHT SWEATS.—Da Costa considers ergotine the best remedy for night sweats of phthisis—two grains three or four times a day. It is less prompt than atropia, but it is free from any unpleasant after effects.

BRITISH QUALIFICATIONS.—H. A. DeLom, M. D., Trinity College, was admitted Licentiate of the Royal College of Physicians, London, on the 23rd of February.

REMOVAL.—Dr. Theo. S. Covernton, assistant physician to the Toronto Lunatic Asylum, has resigned his position and removed to Winnipeg. He has entered into partnership with Dr. Kittson, formerly of Hamilton, Ont.

TETANUS SUCCESSFULLY TREATED BY CHLORAL AND BROMIDE.—Dr. J. W. Salter (*The Practitioner*) reports a case of traumatic tetanus in a man 51 years of age, successfully treated with large doses of chloral and bromide, sometimes every half hour, but usually every two hours, — occasionally at longer intervals. The total amount given in the twenty days treatment was sixty drachms of chloral and eighty drachms of bromide, or three and four drachms per diem respectively.

SCALY ECZEMA.—Dr. Edward Sharp, of Salem, N.J. (*Med. Bulletin*), recommends the following combination: R. Adipis, lb. j.; lac. sulphuris 3 iv.; ung. hydr. ox. rub., 3 x.; ol. gaultheriæ, 3 j. Mix the sulphur gradually with the red mercurial ointment, adding the lard from time to time, as the mixture requires dilution; and when all the lard and mercurial ointment are thoroughly mixed with the sulphur, add and intermingle the oil of wintergreen.

NASO-ORAL RESPIRATOR—Through the kindness of Mr. Mills, druggist of Brantford, we have received one of Dr. McKenzie's naso-oral respirators. The instrument is neatly made and well adapted for the inhalation of medicinal vapors, where such may be indicated in the treatment of disease. We intend giving it a trial upon the first favorable opportunity, and will report the result of our experience in its use.

FORMULA OF PUTTNER'S EMULSION.—Each tablespoonful of Puttner's Emulsion contains the following:

R. Ol. Morrhuæ Opt.	70 per ct.
Calcis Hypophos.	grs. iii.
Sodæ "	grs. iii.
Pancreatine.....	grs. i.
Tr. Ferri.....	grs. ii.

APPOINTMENTS.—Drs. Barrett, I. H. Cameron, A. H. Wright, W. J. Wagner, and W. W. Ogden have been appointed to conduct the medical examinations for Victoria University for 1882 in Toronto.

Dr. McKeough, of Chatham, has been appointed examiner on surgery and botany in the University of Trinity College, and Dr. Baptie on chemistry.

Dr. Grasett, of Trinity Medical College, has been appointed examiner in surgery, and Dr. M.

Aikins, of the Toronto School of Medicine, in anatomy, in Toronto University.

Dr. Joseph Pancoast, Emeritus Prof. of Anatomy in Jefferson Medical College, Philadelphia, died on the 7th ult., at the advanced age of 77 years.

Books and Pamphlets.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A handbook for students and practitioners. By Henry Hartshorne, A.M., M.D., lately Professor of Hygiene in the University of Pennsylvania, etc. Fifth edition, thoroughly revised and improved, 12mo., pp. 669, with 144 illustrations. Cloth, \$2.75. Philadelphia: H. C. Lea's Son & Co., 1881. Toronto: Hart & Co.

We cannot speak too highly of this brief epitome of medicine. It is a master-piece of condensation. The author gives by way of introduction, a succinct review of the history of medicine and the different systems. He then proceeds to the discussion of general pathology, semeiology, general therapeutics and nosology. The second part of the work treats on special pathology and practice. Many new additions have been made throughout the work, some new subjects written upon, and a new section is added upon eyesight, its examination and correction. We have much pleasure in recommending this handbook to medical students and practitioners.

NERVOUS DISEASES, THEIR DESCRIPTION AND TREATMENT. By Allan McLane Hamilton, M.D., Fellow New York Academy of Medicine, &c., second edition. Philadelphia: H. C. Lea's Son & Co. Toronto: Hart & Co.

This is an eminently useful work on the disease on which it treats. It is concise and practical, yet sufficiently comprehensive for general use. Many changes have been made, and much new matter added to the present edition. The chapter on diseases of the lateral column of the cord is entirely new. The work is well illustrated, and the plates are good. The illustrations are chiefly borrowed from Charcot, Gowers, Clarke, and others. The author gives a clinical history of a number of cases in illustration of the character of the different diseases under discussion, which will be found of interest to the student of nervous diseases. The various diseases are well described,

and the suggestions in regard to treatment very valuable. We have much pleasure in recommending the work as one that will form a useful guide in the diagnosis of treatment of nervous diseases.

A SYSTEM OF SURGERY, THEORETICAL AND PRACTICAL, in treatises, by various authors, edited by T. Holmes, M.A., Cantab. Lecturer on Surgery, at St. George's Hospital, London—First American from second English edition, Vol. III. Philadelphia: H. C. Lea's Sons. Toronto: Hart & Co.

The third and last volume of this interesting and valuable work on surgery, has just been received. The volume before us embraces diseases of the respiratory organs, diseases of the bones, joints, and muscles, diseases of the nervous system, gun-shot wounds, operative and minor surgery, and miscellaneous subjects. We have already expressed our very high appreciation of the value of this excellent work on surgery. It is the best and most exhaustive treatise on surgery yet published, and those who are devoting special attention to this subject cannot afford to be without it.

STUDENTS MANUAL OF VENEREAL DISEASES, by Berkeley Hill and Arthur Cooper.

CLINICAL HANDBOOK OF DISEASES OF WOMEN, by W. Symington Brown, M.D.

LECTURES ON ELECTRICITY, by A. D. Rockwell, M.D.

INDEX OF SURGERY, by C. B. Keetly, F.R.C.S.

SYMPATHETIC DISEASES OF THE EYE, by Ludwig Mauthner, M.D.; translated by Warren Webster, M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

We can heartily recommend the above epitomes, not only for students, but practitioners, who will find in these digests careful and judicious selections, valuable notes, and most important aids in cases in practice presenting difficulties or anomalies that would involve for their elucidation a long search through a great variety of treatises on the different subjects, thus economising time that frequently can be ill spared from the pressing duties of general practice.

A TREATISE ON HUMAN PHYSIOLOGY. Designed for the use of Students of Medicine. By John C. Dalton, M.D., Professor of Physiology and Hygiene in the College of Physicians and Sur-

geons, New York, etc. Seventh edition, with two hundred and fifty-two illustrations. Philadelphia: Henry C. Lea's, Son & Co., 1882. Toronto: Hart & Co.

The new edition of this popular work on physiology, with which medical students are well acquainted, will be welcomed by all. Many changes have been made since the issue of the last edition. These are especially noticeable in the sections on Physiological Chemistry, and on the Nervous System. Notwithstanding the changes and additions the work has not been increased in size, but rather diminished. The work is in Lea's best style of art and handsomely bound.

LECTURES ON THE SURGICAL DISORDERS OF THE URINARY ORGANS. By Reginald Harrison, F.R.C.S., Liverpool, Eng. Second edition. London: J. & A. Churchill. Toronto: Willing & Williamson.

The author of this valuable work has added much new matter to the present edition in the way of improvements in practice, and also by embracing the larger field of the surgery of the urinary organs. The first portion of the work is devoted to a full consideration of stricture of the urethra and its treatment, perineal fistulæ and their treatment, and foreign bodies in the urethra and bladder. He next deals with irritable bladder, hypertrophy of the prostate, and inflammation and atony of the bladder. Four chapters are devoted to a consideration of vesical calculus and its treatment, and the concluding chapters embrace injuries to the bladder, surgery of the kidney, tumors of the bladder and prostate, etc., etc. The work is a valuable accession to the literature of this important subject, and the author's opinions and practice are worthy of the fullest consideration.

Births, Marriages and Deaths.

In Toronto on the 3rd ult., the wife of Dr. Chas. O'Reilly, Medical Superintendent of the Toronto General Hospital of a son.

At Ripley, Ont., on the 20th of February, the wife of Dr. M. Stalker of a daughter.

In Kingston on the 11th ult., Dr. Horatio Yates, aged 61 years.

At Ancaster, Ont., on the 24th ult., Dr. H. Orton, aged 50 years.

At Blairton, Ont., on the 8th ult., Dr. McCay, aged 66 years.

THE CANADA LANCET,

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Original Communications.

CLINICAL NOTES OF THREE CASES OF "TUMOUR," WITH ILLUSTRATIONS.

BY D. MACLEAN, M.D., ANN ARBOR, MICH.

*Professor of Surgery and Clinical Surgery in the
University of Michigan.*

CASE I.—J. H. S., æt. 57, of Milan, Mich. Patient came to the clinique June 4th, 1879, in the hope of having a tumour, which had long been a great burden to him, removed. He stated that the tumour first appeared twenty-two years previously in the region of the groin, and that it had gradually altered its position until it reached its present situation as shown in the accompanying cut. It will be seen that the tumour is attached by a broad base, and hangs over the left hip, the pedicle being nearly related to the crest of the ilium. Patient had no theory as to how or why the tumour had changed its position, but he was quite positive as to the fact of the change having occurred. The tumour measured twenty-eight and a half inches in circumference, and extended from the crest of the ilium to the middle of the thigh. It was not painful, but its weight caused serious inconvenience, to relieve which it was supported in a sac suspended from the opposite shoulder. During the last seven years the growth of the tumour had been much more rapid than formerly.

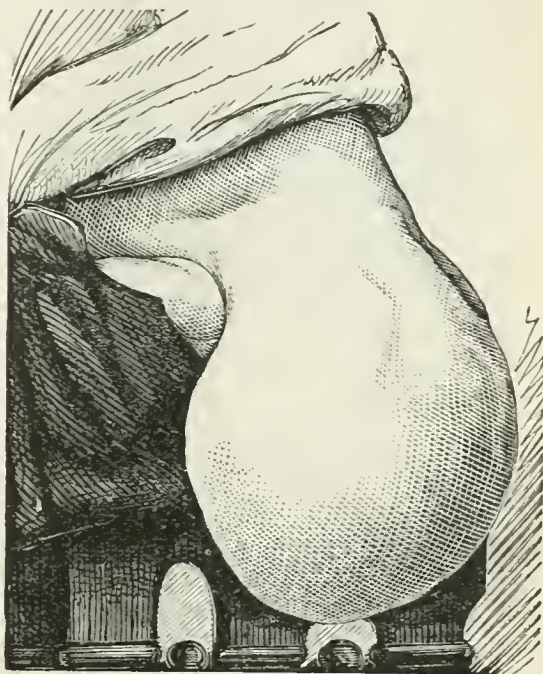
On examination, the tumor was found to be irregularly lobulated, solid, and very vascular. Enormous veins were visible on its superficial aspect.

Patient was extremely anxious for an operation, and as his health otherwise was good, and no contra-indication existed, I agreed to remove it.

Chloroform having been administered, I first transfixed the base or pedicle with a strong double ligature, in the hope of thereby controlling hæmorrhage.

It at once appeared, however, that no material advantage could be gained in this way. I then tried to empty the tumour of its blood by Esmarch's bandage applied to the growth itself. This expedient proving equally futile, I took an amputating knife, and, all hands being on the alert for hæmorrhage, with one sweep I divided the pedicle completely. Notwithstanding the fact that the track of the knife was instantly covered by compressing sponges, one gush of blood occurred, sufficient to blanch the patient and give him a very cadaverous appearance.

All bleeding points were ligated by cautiously exposing the surface of the wound in small sections. The lips were then approximated by a few stitches, and water dressing applied.

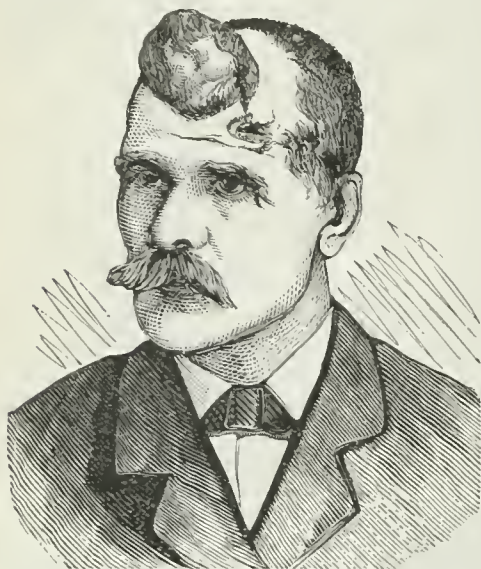


The symptoms of shock were very decided but not alarming, and patient made a rapid recovery, and was dismissed, cured, June 14th, just ten days from the date of operation. Three years have now elapsed since this operation was performed, and it is satisfactory to be able to report that up to the present time the patient has enjoyed excellent health, and as yet no symptoms of return have appeared.

The structure of the tumour was fibrous, degenerating at some points into fatty. Its weight, im-

mediately after removal was thirty-three and one-half pounds.

CASE II.—J. C., æt. 44, of Jackson, Mich. Admitted to the University hospital January 23rd, 1882, on account of a tumour of the forehead. The situation and relative size of the growth is well shown in the accompanying woodcut, copied from a photograph from life.



History.—Patient states that eight years ago a small lump, about the size of a peanut, was noticed over the vertex. After a blow this little tumour became irritated and grew rapidly, until it attained the size of a peach. It was then excised by a surgeon in Jackson, but before the wound healed, the tumour reappeared at the anterior margin of wound, and grew rapidly. This was two years ago. One year ago a second operation was performed by another surgeon in Jackson, but with no better result. By this time the tumour had developed in a direction towards the forehead, leaving the original site entirely free from disease.

On examination, the tumour was found to be firmly attached on its deep aspect. The superficial surface was ulcerated, and poured forth a pretty profuse discharge, composed apparently of water, pus and blood. The skin over the growth was disorganized and could not be utilized to close the gap made by operation.

Patient being a stout, vigorous man, in good health in other respects, and with a good family history, and being greatly alarmed about the tumour and willing to submit to any risk in the

hope of being relieved of it, I determined to operate. I took occasion to point out to the class two serious dangers which had to be encountered. First, the danger of speedy return, owing to the malignant appearance and history of the growth; second, the danger of osteitis, meningitis, etc., owing to the necessity of removing the pericranium, in which tissue it seemed most likely that the morbid structure had originated. Still, I had no hesitation in recommending the patient to take his chance and have the operation performed, and to this he eagerly assented.

Jan. 26th.—Chloroform having been given, I first of all removed the growth by a circular incision right down to the bone. I then peeled off the pericranium as far as it was exposed; and, finally, I applied pure chloride of zinc to the osseous surface.

A large number of vessels bled, and were secured by catgut ligatures. No attempt was made to close the gap, which was left to heal by the efforts of nature, aided afterwards by the introduction of many skin-grafts. The after treatment consisted in simple dressing to the surface of the wound, and its careful protection by cotton wadding. The bone at first appeared white and dead, but gradually points of granulation appeared and increased till the white surface presented the appearance of a healthy, healing sore.

Feb. 2nd.—Patient complained of a very severe pain in his head, and mercury was at once prescribed. The headache was relieved in a day or two, but it was not until the 22nd Feb. that it disappeared finally. At this time, also, a very thin layer of dead bone was floated up on the surface of the granulations, and was lifted off with the dissecting forceps.

March 3rd.—Wound nearly cicatrized, the islands of grafts having grown together all over the surface. Dismissed, cured.

April 17th.—Latest report from patient completely satisfactory in all respects.

The specimen was sent to the histological laboratory, and was carefully investigated by Prof. Stowell, who found the structure to be that of "*spindle-celled sarcoma*."

CASE III.—J. W. Y., æt. 72, of Lansing, Mich. Admitted to the University hospital March 13th, 1882, on account of a tumour of the right thigh. The dimensions and situation of this tumour are

accurately shown in the woodcut, which is copied from a photograph from nature.

It extended from the perineum to within four inches of the knee. At Poupart's ligament, it extended inwards nearly to the femoral vessels. The left thigh measured thirteen inches, the right twenty-nine. When the patient contracted the muscles of the thigh, the tumour felt as hard as cartilage; when they were relaxed, it felt much softer, and several experienced surgeons had diagnosed fluctuation.



The following is the patient's statement of the history of his case: Ten years ago he observed a small, firm lump on the inside of the thigh, about five inches above the knee. It was about the size of a hen's egg when first observed. It was not painful, nor has it ever been so. Patient thinks that the growth has been much more rapid of late, and he believes that it interferes somewhat with his general health, as he is losing flesh and strength. On the whole, however, his general health is very good for a man of his age, and he is exceedingly anxious to be relieved of his encumbrance.

My diagnosis, as stated to the class on the occasion of his first appearance at the clinique, was *fatty tumour*. Still, as a good many experienced surgeons had diagnosed *cystic fibroid* (some of my colleagues among the number) I was induced to

test the matter with an exploring needle. The result was negative.

The length of time the tumour had been growing, viz., ten years, was of itself sufficient to exclude the diagnosis of malignant disease, and therefore my original opinion seemed to be the more probable one. The only point which made me hesitate as to the propriety of operating was the size of the wound which would be left, and which, in a man of seventy-two, might prove to be too great a strain on his powers. However, the courageous spirit and vigorous constitution in this patient seemed to me to justify a hopeful prognosis, and I determined to accede to his urgent entreaties and perform the operation. The farther history of the case is soon told:

March 18th, 1882. In presence of the class I removed the tumour by one long, straight incision extending its whole length. Its fatty structure was at once demonstrated. The operation lasted but a few moments. A few small vessels required to be ligatured, which was done with catgut. Some redundant integument was then trimmed off, and the wound closed by nine hair sutures.

Very slight shock resulted; the wound healed very kindly, and within three weeks from the date of operation, the patient was dismissed, *cured*.

P.S.—For the histories of these cases I am indebted to my efficient clinical clerk, Mr. E. A. Christian, B.A.

THE ANTISEPTIC MANAGEMENT OF WOUNDS.

BY J. H. BARKWELL, M.D., ETC., BATTERSEA, LONDON.

The practice of antiseptic surgery, or Listerism, as it has been termed, *i.e.*, the keeping of a wound aseptic from first to last, requires not only a perfect understanding of the principles on which the treatment is based, but also a careful consideration of the means employed to gain that end, and a thorough knowledge of the difficulties to be met with. This can only be obtained by practice and experience; and gradually the slips and inaccuracies which may at first occur disappear, and we become educated up to the necessary standard of excellence, so that what we tried to attain formerly by unremitting attention and zeal we now gain almost

instinctively and without effort. For a full and elaborate account, we must seek the fountain-head in Lister's writings, or better still, attend the practical work under Lister himself, now of King's College, formerly of Edinburgh. Our first duty will be to consider the various antiseptics at present made use of. The main qualities required in an antiseptic are convenience, cheapness, and of necessity, efficiency. Carbolic acid so fulfils all these points, that it still retains its position at the head of the list, Mr. Lister himself having given up the use of thymol after a thorough trial. Carbolic acid, further, is volatile—a property essential to any antiseptic in use as a spray. The best form of acid to employ is the absolute phenol of Messrs. Bowdler & Bickerdike, price 6/9 per lb. Its advantages are, that it has no objectionable odor, is readily soluble, and does not irritate the operator's skin; while the more crude and impure forms met with are occasionally so disagreeable and harsh, that some German surgeons anoint their hands with vaseline before beginning work, in order to obviate this inconvenience. There are two watery solutions—strong and weak. The strong consists of one part of the acid crystals in twenty parts of water. It is used for washing and purifying the skin and instruments, for keeping sponges, drainage-tubes and horsehair soaking in and for the steam spray. The weak, which is half the strength of the strong (one in forty), is required for washing the sponges during an operation, for soaking the deep dressing in, and in dressing generally. The lotions should be filtered after being made, and had better be kept in large blue glass-stoppered bottles, properly and carefully labelled. An alcoholic solution of the strength of one part of the acid in five of spirits of wine, is employed for rendering those wounds aseptic which are seen a few hours after receipt of injury, and specially for those cases in which dirt and foreign matter have obtained access to the tissues. There are two oily solutions. The weak, of one part of the crystals in twenty parts of olive oil, is used for purifying and lubricating urethral bougies, sounds and catheters, immediately previous to their introduction; the strong, of one part crystals in ten of oil, may be applied to exposed dead bone in septic cases. A piece of lint soaked in the oil is laid on the necrosed part and covered with a piece of gutta-percha tissue. Antiseptic gauze is prepared by

charging unbleached muslin of open texture with crystallized carbolic acid one part, common resin five parts, solid paraffine seven parts. This last prevents adhesiveness. Paraffine does not blend at all with carbolic acid in the cold, and therefore simply dilutes the mixture of carbolic acid and resin, without interfering in the least with the tenacity with which the resin holds the acid. The carbolized gauze, as prepared in the Royal Infirmary, Edinburgh, costs the establishment a little under 1½d. per yard; in retail shops it is much higher. The prepared gauze is used for the superficial dressing, for bandages, and in loose pieces for padding and dressing irregular surfaces; and also when wet, wrung out of 1.45 aqueous, for the deep dressing. The acid is only given off in sufficient quantity when the gauze is moist and at the temperature of the human body. Mackintosh consists of thin cotton cloth having a layer of india-rubber waterproofing on one side. This should be evenly applied and continuous, so that the material is quite impervious. There must be no pin-holes in it. It is used to place over the superficial dressing of gauze, as shall be described hereafter. Protective is made of oiled silk, coated on both sides with a thin layer of copal varnish, which renders the silk impervious to the carbolic lotion. Over this again a fine layer of carbolized dextrine is laid, which allows the 1.40 lotion into which the protective is dipped immediately before use, to wet and so thoroughly purify the surface. The protective is neither aseptic nor yet antiseptic, hence the necessity for making it so before application. Its action is thus purely negative. It keeps the edges of the wound clean, moist and free from the irritating action of the antiseptic dressing employed; allows discharge to escape readily from under it into the dressing; does not adhere, and so is easily removed when necessary. Carbolized catgut is prepared by adding twenty parts of carbolic acid crystals to two parts of water, and to this mixture add one hundred parts of olive oil. Place this mixture in a flask, and in this put several skeins of catgut. These should be kept above the level of the watery deposit which falls, by means of a few glass marbles or rods. Seal the flasks hermetically and set them aside in a cool place. The gut should not be used for five or six months, and the longer it has been prepared the better. Carbolized silk is prepared by immersing

a reel of silk in melted beeswax, containing about one-tenth part carbolic acid. The silk is drawn through a dry cloth as it leaves the hot fluid, to remove the superfluous wax. All these various requisites should be kept by themselves, apart from all other business. The various forms of steam sprays employed are constructed on the principle of Adams' steam inhaler. On arriving at a patient's house, we fill the spray with boiling water, which should always be kept ready for the purpose; so as not to detain one whose time is so very precious. We light the lamp and judge that steam is up, if it escapes with great force, and if it has a distinctly blue color when we shut off all the carbolic acid, which is done by compressing the carbolic tube with the fingers, and so seeing steam alone. One has also the peculiar rushing sound, the smell and taste of the spray to guide them in ascertaining if all is in working order. The other antiseptics employed may now be discussed. A solution of chloride of zinc, forty grains to an ounce of distilled water, was introduced by the late Campbell de Morgan. It is chiefly used to brush over the cut lips of incisions and wounds in regions which we cannot hope to keep aseptic, as in excision of the upper jaw, or lateral lithotomy. We may leave our dressing of strips of lint soaked in this lotion unchanged for forty-eight hours, so potent is the salt; and in this way, thanks to its searching character and non-volatility, the pain and unrest of dressing is avoided, and a dangerous period, during which blood-poisoning from absorption might take place, is tided over. Considerable pain and smarting ensue after application, and this continues for a varying period, according to the temperament of the patient. Boric acid is used as lotion, lint and ointment. It is non-volatile, very unirritating, in fact the least so of all antiseptics, but is not at all searching. It may prevent, it can hardly eradicate putrefaction. The lotion, of one part of the crystals in thirty parts of water, is colored red with litmus, and thus at a glance we may distinguish it from other lotions. It is used for moistening the boric lint and for washing sores. The lint is prepared by soaking ordinary surgeons' lint in a boiling saturated solution of boric acid, colored red with litmus. It is allowed to cool, the lint is hung up to dry, and the remaining fluid poured off and used as boric lotion. The lint is of a pink hue and glitters with the soft flat mica-

ceous crystals. We moisten the boric lint with boric lotion before application, and this for the same reason as we also soak the deep dressing of gauze or the protective in carbolic lotion. The surface of the materials may be covered with germs of all kinds, because the antiseptic is not acting. We destroy these organisms by our active lotion, and as the aseptic discharge finds its way afterwards into the dressing, it dissolves and sets free quite enough of the stored-up agent to render it also antiseptic. Boric ointment may be prepared by rubbing up one part of finely levigated boric acid in five parts of vaseline. It acts as a sort of antiseptic protective, and is specially useful in the treatment of wounds in the face, where it allows the discharge to escape, keeps the wound sweet, and never adheres. An emulsion of salicylic acid in 1.40 carbolic lotion was introduced by Mr. Lister, for the purpose of checking the chemical changes which may take place under dressings which have been left unchanged for some time. These changes due to a chemical action between the gauze and the discharges under it, the sweat, etc., give rise sometimes to a troublesome irritation and eruption, formerly dubbed *ecrema carbolicum*. A very little salicylic cream smeared on the surface of the protective or deep dressing effectually disposes of this. In private practice one finds the carrying out of antiseptic details even less troublesome than in hospital. The spray is not so liable to get out of order, since it never changes hands. We do not make use of so many assistants, nor yet have we the convenience and benefit of bystanders to consider. The surgeon may carry in his spray bag a small supply of crystals of carbolic acid, so that he has practically a great quantity of lotion in a very small space; he has also sponges; but the dressings and lotion are usually found in readiness at the patient's house. While the patient is being anæsthetized, one gets the spray in order, arranges instruments and dressings. The spray during the operation stands on a small table, in a convenient position, and requires but little attention. Should the carbolic lotion in the spray bottle become exhausted, or should it be necessary to shift the position of the spray, then the surgeon merely lifts his guard out of the lotion, covers the wound with it, and then puts things to rights. Instruments may lie on a large plate or in a tumbler of water, their points being saved by coming in contact

with a cake of india-rubber laid over the bottom. Sponges of course are taken in hand by an assistant or nurse. The patient should be seen next day after operation, to see that all is going on well. The future dressings are managed as in hospital. A daily visit is not required, since by means of a post-card the patient may send word to the surgeon should discharge appear, or any discomfort be experienced.

DIABETES MELLITUS WITH ALBUMINUREA RESULTING FROM INJURY—RAPID AND FATAL TERMINATION.

BY J. ELLIS, M.D., MUSKEGON, MICH.

Mr. McC. consulted me, February 8th, 1882, regarding his daughter, a bright little girl of seven years and five months. She was suffering from marked dyspnoea from coming up stairs, and very weak, but felt well otherwise. From the father I learned that for two weeks past she had lost flesh rapidly, and was passing daily about a gallon of limpid urine; appetite and thirst both excessive. Having just come from the train from a visit to Canada, and the office temperature being in the neighborhood of zero, I simply gave a placebo and asked the mother to bring the child in the morning and some of the child's urine—suspecting diabetes. Next morning I was requested to see the child, as she was much worse; but as I could not attend Dr. Cook saw the case for me. The child was drowsy with flights of delirium; pupils dilated; labored breathing. He received two vials of urine which we examined separately—finding large quantities of sugar and albumen; specific gravity 1030. The microscope revealed large quantities of urates, with a few epithelial cells and tube casts.

Called at 12 o'clock—Child rapidly growing worse; difficult to arouse her; pupils would not respond to light, and widely dilated; respirations rapid; pulse small and irregular. 6 p. m.—passing into comatose state; marked serous effusions into pleura. Child died about midnight. The following interesting history was given by the mother. The child was always strong and healthy, never was sick except an attack of scarlet fever in November, 1880, which was mild, and to all appearances completely recovered from. Five weeks ago,

while playing at school, she fell on the ice on her face, knocking out two teeth. After the pain ceased she seemed all right. The mother noticed shortly after this that upon waking the child she seemed bewildered and could not collect herself for some time. Three weeks since she became dull and was not so playful, and now seemed much dazed upon waking. She began to complain of distress in the stomach, and lost flesh. Two weeks ago her mother noticed an increase of appetite and thirst; also increase of urine voided; these latter conditions gradually increasing, till now her appetite was voracious, drinking almost constantly and voiding about a gallon of urine per diem. During the last two weeks she complained of headache and lassitude, also was fretful and did not want to play with other children. She continued to attend school until within a few days past. The treatment consisted of merely palliative measures as her condition was considered hopeless as soon as the case was satisfactorily diagnosed. A post mortem could not be had.

QUERIES.—I. Was the albuminurea primary or secondary?

II. Were both or either caused by the fall producing some lesion of brain or nerve centres?

III. Does diabetes mellitus of itself ever run such a rapid course (five weeks from injury, and only two weeks from first diagnostic symptoms)?

Correspondence.

ELECTRICITY IN CHOREA.

To the Editor of THE CANADA LANCET.

SIR,—The following letter from Dr. A. D. Rockwell, of New York, dated April 7th, I am permitted to publish, although not written for publication. I will preface it with the single remark, that I know of no one who has had larger experience, and no one, at least on this continent, who is a more reliable authority in the domain of electro-therapeutics.

"While electricity is of value in the various forms of spasmodic diseases, it must be confessed that its effects are frequently somewhat capricious. At various times I have had the pleasure of witnessing recoveries follow its use in chronic forms of writer's cramp, torticollis and even in palsy agitans, an interesting case of which I published in the October number of the *New England Medical*

Monthly. In the general use of electricity, I think it may be said that too little attention is paid to *detail*. The diseases to which I have referred can undoubtedly, as a rule, be much ameliorated, but it is too much to expect that at present we can hope to cure the majority.

"In regard to chorea, however, the case is different, and I wish that the profession could be impressed with the value of electricity in this disease. I do not refer to recent cases where in a few weeks the symptoms spontaneously subside, aided perhaps by some form of tonic treatment, but to those of a chronic character which persist in spite of judicious medication.

"You may perhaps accuse me of undue enthusiasm, when I say that I have never known a case even of long standing, fail to recover, when the methods of central galvanization and general faradization were faithfully and properly carried out. At the present time I have under my care a lad of 10 years, who has for over a year suffered from a violent form of post-paralytic chorea. His sorrows began with an acute attack of articular rheumatism, followed by partial hemiplegia and ending in chorea of the paralyzed side. An unpromising case, certainly, as could be well imagined. He is recovering rapidly. I treat entirely by central galvanization,—covering the head almost entirely by large well-fitting sponge electrodes and using currents sometimes from as high as thirty (30) cells. I should be sorry, if through any such statement as this, some one should use through the head of a child a current from as many elements as this, without due precaution in the way of the position and size of the electrodes, and in gradually increasing and in as gradually decreasing the strength."

Yours truly,

A. M. ROSEBRUGH.

121 Church-st., Toronto.

April 18th, 1882.

MEDICAL BATTERIES.

To the Editor of the CANADA LANCET.

SIR,—With reference to the communication of Dr. W. Philp, of Hamilton, in regard to the need of improvements in the construction of medical batteries, I have to say that, with your permission, I propose at an early date to give the readers of the LANCET a full description of a new battery

recently made under my instructions, which gives me entire satisfaction. It is a modification of the McIntosh battery, but less complicated and much more convenient.

It contains 18 galvanic cells and a faradic battery, combined in the same case. The case is not much larger than the ordinary faradic battery and weighs when fully charged only 15 pounds, with electrodes and battery complete. I believe similar batteries could be supplied for about \$45 each.

Yours truly,

A. M. ROSEBRUGH.

Toronto, April 20th, 1882.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

Reported for the CANADA LANCET.

The regular quarterly meeting of this Board was held at Greenville, Michigan, on April 11, 1882, in connection with the Sanitary Convention held at the same time and place. The following members were present:—Rev. D. C. Jacokes, of Pontiac; J. H. Kellogg, M.D., of Battle Creek; Arthur Hazlewood, M.D., of Grand Rapids; Jno. Avery, M.D., of Greenville; and Henry B. Baker, M.D., of Lansing, Secretary. William Oldright, M.D., chairman, and J. J. Cassidy, M.D., member, of the newly appointed Provincial Board of Health of Ontario, were present and were invited to take seats in the meeting. In the absence of the president of the Board, Dr. Jacokes presided.

The Secretary presented the subject of inspection of immigrants, and stated that the National Board of Health had granted the request of this Board for an inspection service at Port Huron, and the system would go into effect on May 1, at which time the whole system, by coöperation of several State Boards of Health, would go into effect. He suggested that the health authorities of Toledo and Cleveland be invited to join in this movement. He stated that at the meeting of the Sanitary Council of the Mississippi Valley, at Cairo, Ill., April 19, this subject would be considered, and that it was desirable that this Board be represented at that meeting. By vote of the Board, Dr. Baker was requested to represent the Board at that meeting. Dr. Oldright spoke of the inspection of im-

migrants at Toronto, and of the importance of notification to other boards of danger to be feared from immigrants. He also said any movement made by this Board would meet with hearty co-operation by the Ontario Board. He said the work done by this Board for the restriction of scarlet fever and diphtheria was fully as important as that for the restriction of small-pox.

The following motion was carried :—

That the Secretary be instructed to correspond with the health authorities of the Dominion of Canada, and the several Provinces thereof, and of provincial and municipal boards of health where they exist, asking their co-operation in the proposed immigrant inspection service.

Dr. Hazlewood read a proposed document giving best household antidotes to be used in case of poisoning, while waiting for a physician or when one is not to be had. It was accepted and the committee authorized to modify it before publication in the Annual Report.

Dr. Hazlewood, in the committee on poisons, then presented a letter from Dr. Gordon, of Swartz Creek, relative to lead-poisoning by the use of a feeding-bottle (which was exhibited to the Board) in which the sinker keeping the supply pipe in the milk, was of lead and so arranged that all the milk had to pass over it before entering the infant's mouth. The Secretary was requested to notify the manufacturer of the pernicious character of the bottle, and the report was accepted, and ordered to be published in the Annual Report.

Circular 35, revised, relating to the duties of health officers, was presented, adopted, and 20,000 copies ordered to be printed:

Dr. Kellogg, one of special committee to prepare a circular on criminal abortion, made a report and read a proposed circular. The report was accepted, the committee continued, and the subject of issuing the circular laid over.

Dr. Kellogg was requested to represent the Board at the meeting of the American Medical Association at St. Paul.

The next meeting of the Board will be on Tuesday, July 11, 1882.

A MAN recently exposed to small-pox, took as a preventive, three quarts of whiskey. The coroner's jury after mature deliberation rendered a verdict of "death from excessive prophylaxis."

Selected Articles.

ABSTRACT OF CLINICAL LECTURES, DELIVERED AT THE LONDON HOSPITAL.

BY JONATHAN HUTCHINSON, F.R.C.S.

The Pre-cancerous Stage of Cancer, and the Importance of Early Operations.—The patient who has just left the theatre is the subject of cancer of the tongue in an advanced stage. As I demonstrated to you, the lymphatic glands are already enlarged. It is hopeless to think of an operation, and there is nothing before him but death, preceded and produced by a few months of great and continuous suffering. His case, I am sorry to say, is but an example of what is very common. Not a month passes but a case of cancer of the tongue presents itself in this condition. The cases which come whilst the disease is still restricted to the tongue itself are comparatively few; nor does this remark apply only to the tongue. "Too late! Too late!" is the sentence written but too legibly on three-fourths of the cases of external cancer concerning which the operating surgeon is consulted. It is a most lamentable pity that it should be so; and the bitterest reflection of all is, that usually a considerable part of the precious time which has been wasted has been passed under professional observation and illusory treatment. In the present instance, the poor fellow has been three months in a large hospital, and a month under private care. I feel free, gentlemen, to speak openly on this matter, because my conscience is clear that I have never failed when opportunity offered, both here and elsewhere, to enforce the doctrine of the local origin of most forms of external or surgical cancer, and the paramount importance of early operation. I have tried every form of phraseology that I could devise, as likely to impress this lesson. Nearly twenty years ago, I spoke to your predecessors in this theatre concerning the "successful cultivation of cancer;" telling them how, if they wished their patients to die miserably of this disease, they could easily bring it about. The suggestion was, that all suspicious sores should be considered to be syphilitic, and treated internally by iodide of potassium, and locally by caustics, until the diagnosis became clear. More recently, I have often explained and enforced the doctrine of a pre-cancerous stage of cancer, in the hope that, by its aid, a better comprehension of the importance of adequate and early treatment might be obtained. According to this doctrine, in most cases of cancer of the penis, lip, tongue, skin, etc., there is a stage—often a long one—during which a condition of chronic inflammation only is present, and upon this the cancerous process becomes engrafted. I feel quite sure that the fact is so. Phimosis and the consequent balanitis lead to cancer of the penis; the soot-wart

becomes cancer of the scrotum ; the pipe-sore passes into cancer of the lip ; and the syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes on cancerous growth. The frequency with which old syphilitic sores become cancerous is very remarkable ; on the tongue, in particular, cancer is almost always preceded by syphilis, and hence, one of the commonest causes of error in diagnosis and procrastination in treatment. The surgeon diagnoses syphilis, the patient admits the charge, and iodide of potassium seems to do good ; and thus months are allowed to slip by in a state of fools' paradise. The diagnosis, which was right at first, becomes in the end a fatal blunder, for the disease which was its subject has changed its nature. I repeat that it is not possible to exaggerate the social and clinical importance of this doctrine. A general acceptance of the belief that cancer usually has a pre-cancerous stage, and that this stage is the one in which operations ought to be performed, would save many hundreds of lives every year. It would lead to the excision of all portions of epithelial or epidermic structure which have passed into a suspicious condition. Instead of looking on whilst the fire smouldered, and waiting till it blazed up, we should stamp it out on the first suspicion. What is a man the worse if you have cut away a warty sore on his lip, and, when you come to put sections under the microscope, you find no nested cells ? If you have removed a painful, hard-based ulcer of the tongue, and with it perhaps an eighth part of that organ ; and, when all is done, and the sore healed, a zealous pathological friend demonstrates to you that the ulcer is not cancerous, need your conscience be troubled ? You have operated in the pre-cancerous stage, and you have probably effected a permanent cure of what would soon have become an incurable disease. I do not wish to offer any apology for carelessness, but I have not in this matter any fear of it.

Empiricism and Specifics.—The patient whom we are about to discharge from the Talbot ward, cured of severe pemphigus, was admitted for a special purpose. He was sent in by my friend and former pupil Dr. Tom Robinson, in order that he might be cured. You will say that the hope of cure is the motive which brings most of our patients to us. True ; but in this instance there was something more than this. Dr. Robinson could easily have cured him himself, but he sent him here in order that I might work the miracle of cure under your eyes and thus claim your belief in the efficacy of drugs. You will remember his state when admitted ; he was covered from head to foot with bullæ ; the trunk was less severely affected than his limbs, head, and genitals ; on these there was nowhere a space as large as the palm free from bullæ, and on the trunk also there were a considerable number. He was in a miserable

condition from pain and irritation. The eruption had been out about ten days, and it affected the mucous membrane of the mouth as well as the skin. You may remember that we kept him in bed for a few days before we used the magician's wand, in order that all might see that there was no natural tendency to amelioration. More bullæ came out ; then, without making the slightest change in diet, we ordered a few drops of a tasteless solution of arsenic to be swallowed three times a day. The result was, at our next visit, most of the bullæ had dried, and there were no fresh ones. He continued to improve greatly for ten days, when suddenly a few fresh small bullæ seemed to threaten a relapse. We doubled the dose of our remedy, making the dose eight instead of four drops ; and, from that day, with the most trifling exceptions, the recovery has been uninterrupted. With such a fact before you, let me beg of you, gentlemen, to believe in drugs, and to treat empiricism with respect. In the prescription which I ordered, I availed myself solely of empirical knowledge ; I prescribed, just as any old woman might prescribe, that which I knew would do good. Concerning the nature of pemphigus, I knew nothing ; of its cause, absolutely nothing ; of its clinical relationship, but little ; of the *modus operandi* of arsenic, I knew scarcely more ; but this I did know as a fragment of assured conviction, that arsenic would cause the pemphigus eruption to disappear, and the patient to regain his health. Far be it from me to speak slightly of scientific work ; let us by all means work as hard as we can in the laboratory and microscope-room, and penetrate as far as we possibly can into the mysteries of disease ; let us never weary in our search after causes, or in our endeavor to find practical application for the facts of physiology. But, whilst doing this, let us remember that, as regards the relief of suffering, much of our usefulness must be based upon knowledge which is nowise scientific, but simply a matter of experience and memory. We have many specifics for many maladies, or rather for many symptoms, and he is the most successful practitioner who has stored in his memory the largest number of them. As years go on, we shall add many more to our list ; and I doubt not that there are those who now listen to me who are destined to give help in their discovery ; for discoveries in this direction are rarely made by single observers, but rather by the concurrent work of many experimenters, all keeping their eyes open, willing to try new things, and resolute to store faithfully the results of their operations. Iodide of potassium for tertiary syphilis, the bromide for epilepsy and as an anaphrodisiac, iodoform for phagedena and specific ulceration, balsam of Peru for scabies. So silently have these invaluable specifics been introduced into practice, that it

would puzzle most of us to say who first recommended them. I mention this fact, in order to show how important is the honest labor of all in the pursuit of therapeutics. We all prescribe, and we ought all, on system, to observe and record the results of our observation as to the effect of drugs. Five-and-twenty years ago, I believe that the case of pemphigus which you have seen cured would have been found incurable in all the medical institutions of the world, with one single exception. Much more recently than that, the disease was pronounced by Hebra to be invariably fatal. So, indeed, it would have been to this day, if we had not found out arsenic. I know of nothing else that will cure it. Our patient was already beginning to emaciate, and, in the course of a few months—possibly of a few weeks—he would have had to die, worn out by the constant discharge from his skin, had we not put arsenic into his blood. Never shall I forget seeing a poor wretched child carried on a bed into Mr. Startin's out-patient room at the Blackfriars Hospital for Skin Diseases. It had been brought straight from the wards of one of our large hospitals, where, during three months, all had been done for its help that benevolence, aided by the science of the day, could suggest. Yet it was emaciated to skin and bone, and so covered with sores, that it was impossible to put his clothes on. A few minims of arsenic were prescribed, and in a few weeks the child was well. So much for empirical knowledge; so much for drug-specifics.

Prompt Amputation in Traumatic Gangrene: Importance of Amputation High Up.—In cases of traumatic gangrene, ought amputation to be performed without waiting for a line of demarcation to be formed? I believe that the reply of most surgeons to this question will be an unhesitating affirmative. Such certainly would be my own. We have recently had a very instructive case. A man aged more than fifty, but of good constitution, was admitted with a compound fracture of the lower third of the leg. We tried to save it, and the limb was put up in antiseptic dressing. The foot, however, became gangrenous, and, about the sixth day after admission, Mr. Tay amputated the limb below the knee, the man being at the time very ill. The amputation was done through perfectly sound parts, but it was presently followed by gangrene of the stump. The flaps became livid, and the man was in a most urgent condition. Mr. Tay and myself, in consultation, determined at once to perform a second amputation; and, within twenty-four hours of the first, this was done in the lower third of the thigh. The man did well, and the stump on the second occasion has made, as you saw the other day, a very good one. The main reason for prompt amputation in such cases is, that the gangrenous process is a very dangerous one. Whilst soft parts are dying, and the circulation still going on to some extent through them, the blood

becomes poisoned by the absorption of gases and fluids from the putrescent parts, and a most dangerous condition of septicæmia results. Of this state a rapid pulse, a sunken countenance, high temperature, and vomiting are the most constant signs. It is remarkable how quickly they are sometimes relieved by the removal of the dying part. It may be that the process of mortification is also attended by a shock to the nervous system, but I suspect that the chief part of the mischief is done through the blood. In the pyæmia which results from phlebitis, it is of no use to amputate after once the poisonous emboli have been shed from the inflamed vein into the blood. It is then too late, for the secondary abscesses will form, whether you remove the original focus or not. In the septicæmia from gangrene, however, the case is different. Here it seems to be easily possible for the blood to rid itself of contamination. I well remember the case of a young soldier who was under treatment some years ago for a damaged foot, the consequence of a Canadian frost-bite. He had also obliteration of the femoral artery. My junior colleague at the time amputated through the tarsus. The stump never healed, and, some time after, I amputated in the upper third of the leg at a great distance from the disease, for the whole of his leg looked at the time as healthy as yours or mine. I went high up, because I knew that the femoral artery was occluded. The result, however, was that the stump passed into gangrene, and very soon we had all the symptoms of the most severe form of that malady. The patient had frequent vomiting, a very rapid pulse, and was indeed in such a critical state when on the third day I decided to amputate again, that I did not dare to have him taken from his bed. The second amputation, performed high up in the thigh, saved his life. No ill symptoms occurred after it, and the stump healed well. I am inclined to believe that usefulness of amputation in gangrene will become more widely appreciated, and that this measure will be resorted to, not exclusively in traumatic gangrene, but in all forms which are attended by serious constitutional symptoms. If a part be simply passing quietly into a mummified condition, and the patient's health not suffering, then there is no reason for interfering until you see where nature is going to make the separation. There is, indeed, no reason for interfering at all, for you must let nature finish the work. If you amputate near to the line of demarcation, your stump is almost certain to slough, and all that you must dare to do in the way of help in such cases is just to saw through the bones when they are laid bare. The explanation of disappointment in amputating for gangrene, whether traumatic or otherwise, is, I feel sure, almost always from amputating too near to the disease. In all such cases, we ought always to go high up. If the foot be

concerned, go above the knee; if the upper extremity near to the shoulder. You must think rather of the patient's life than of the length of his stump. Adopting this rule, I have of late years more than once amputated for severe forms of senile gangrene with very excellent results.

Can a Man have Syphilis Twice?—The man whom we have just seen offers a remarkable example of the occurrence of a second chancre soon after the first. His second sore has been, as I have repeatedly demonstrated, characteristically indurated. He is quite candid, and makes no doubt that this sore was the result of contagion. Yet it is barely a year since he had his first chancre, and this was followed by an eruption of which he had scarcely got clear when this second sore occurred. The case is proof that a man may have an indurated sore on the penis within a year of a former one, but it is not proof that he may have syphilis twice, for this patient has not, as yet, had any constitutional symptoms as the result of the last chancre. If, however, you ask me for an answer to the general question, Can a man have true complete syphilis twice? then I must reply clearly that he can. Such cases are rare—as rare, perhaps, as examples of second attacks of small-pox—but they do occur. I am at present attending a gentleman who has a terrible phagedenic chancre and rupial eruption, and who unquestionably had complete syphilis, chancre, sore throat, and rash, seven years ago. I have also a second case under care, very much milder, but illustrating exactly the same fact, with almost precisely similar dates. Second chancres are, however, far more common than second attacks of constitutional syphilis. Many of them are the result of fresh contagion, but seem to have no power to produce constitutional symptoms; but others are not from contagion at all, but form in connection with a taint still remaining from the first attack. It is a most important fact that indurations may form in the penis in every respect exactly like Hunterian chancres, not distinguishable in any way, and yet that they may be merely recurred sores, and the products of constitutional taint. I have seen this over and over again; and M. Alfred Fournier of the St. Louis Hospital has written a very instructive paper on this form of sore. In the case of our patient, it is obviously impossible to say, after the statement I have just made, whether or not his present sore is the result of fresh contagion. It may be simply a relapse, or it may be a gumma. He, however, confesses to exposure; and, as the sore followed in due course, it is probably true that he was afresh inoculated. Second attacks of syphilis are sometimes, as in the case just mentioned, very severe. The same has, I believe, been occasionally noted in recurred attacks of variola. As a rule, however, they are mild, or even abortive. Third attacks may even occur; and so may, as we

are told, third attacks of small-pox. We must explain such facts, I expect, by reference to individual peculiarity and idiosyncrasy, but it is important that they should be known. The belief that syphilis can occur but once in a lifetime is very widely spread amongst a certain class of the public. I have watched with amusement the change in expression in many a young gentleman's face when he got my reply to his smiling suggestion—"A man can not, I suppose, have the disease a second time?"

Treatment of Lichen Psoriasis (Lichen Ruber).—We discharged recently from Sophia ward a middle-aged woman, who was the subject of lichen psoriasis. As I explained at her bedside, I much prefer this name to either of the others by which this disease is known. As you know, it has been named lichen ruber by some, and lichen planus by others. It is, however, essentially a form of psoriasis. It occurs to the same class of subjects, is curable by precisely the same means, and, like psoriasis, is liable to relapse or to recur after considerable periods of health. The case which we have just been studying was of much interest in reference to the points to which I have adverted. Although it certainly was an example of the malady known as lichen ruber, yet in parts the eruption was not distinguishable from common psoriasis. It conformed to the lichen type in that it began in little papules, which occurred in groups; and, when a patch was formed, it was by the coalescence of a number of small papules. This mode of spreading is, perhaps, the chief feature of distinction between the malady in question and common psoriasis. The latter begins as a point, which, spreading at its edge, becomes a papule, which, again enlarged at its border, becomes a patch, possibly a very large one. Thus, psoriasis patches are always almost round, nummular, *i. e.*, like coins or rings, whilst those of lichen ruber are irregular, in lines or patches. In the case in question, most of the eruption was arranged in this manner, but some patches were not. On the elbow-tips and over the ulnæ were patches which, in mode of formation and in accumulation of scales, could not be distinguished from ordinary psoriasis. Our treatment of the case was exactly that of the latter disease—tar externally, and arsenic internally. In nine cases out of ten, these remedies will cure lichen psoriasis pretty quickly. Some of you may remember a man whom we had under care six months, a splendid specimen of the disease. He had been sent to me by Mr. Forshall, of Highgate. It was a first attack, and occurred to a healthy young man. I prescribed arsenic and tar. Through Mr. Forshall's kindness, I had an opportunity of seeing this man again last week. He told me that about six week's use of the remedy quite cured him, and that he has, during the last four months, remained without treatment

quite well. In our last case, however, we have not been so fortunate. Our patient was of a very peculiar nervous system, in fact almost insane, and the influence of arsenic appeared to be to excite her. Several times we had to discontinue it on account of the irritable condition it appeared to produce, and finally she was discharged uncured, in consequence of the trouble which she gave in the ward. As a rule I have found lichen psoriasis more easily influenced by treatment than common psoriasis. The cure is also usually more complete. The periods of immunity are also longer, often not less than seven years; whereas psoriasis, however good the cure, usually relapses, I think, within the year.

Chronic synovitis, arthritis, or struma: Importance of the diagnosis. We have had lately a great many cases of synovitis of the knee-joint. I think you will have observed that, roughly, we may divide all the cases of chronic synovitis into two groups, those which are connected with struma, and those which are of an arthritic nature, in the conventional use of that term. This division is of considerable practical value. Under the arthritic head, I comprise all that are associated with gout, rheumatism, or rheumatic gout, and all gonorrhoeal rheumatism; and of all these, we may say that we expect them to get well. Sometimes there is stiffening, sometimes effusion is very long in disappearing; but still, in nearly all cases, in the end the patient again walks on the limb. It is very different with the strumous group. Here the tendency is to pulpy thickening of the synovial membrane, and to incurable conditions. It may be that destructive changes are warded off by long rest, but the patient is disabled, and the limb useless. We have half a dozen of this kind of knee now in our hands, not bad enough for amputation or excision, but still so bad as to prevent walking. In these cases, we are obliged to forbid walking, whereas in most of the arthritic cases, unless exercise causes pain, it may be permitted with impunity. A considerable variety of condition is presented in this group, and especially in the arthritic process, the older the patient, the more chronic and the less painful is rheumatism. You know that I am in the habit of insisting upon the importance of the patient's diathesis, even in cases of synovitis which is called traumatic. We admit a great many cases in which free synovial effusion has followed a sprain or contusion. In these cases, if the effusion lasts long, or if it is in excess of what its supposed cause will account for, you must suspect the arthritic diathesis. The patient is rheumatic or gouty. We have had numberless illustrations of this. Sometimes it is difficult to get at the exact facts. In the case of a man who has just left us, the synovitis persisted in spite of treatment, and relapsed after an apparent cure. It appeared likely that the case might end as hydrops articuli.

I had repeatedly taxed the man with being gouty, but we could get but little evidence. Last week his employer called on me; I then learned that the man had been for thirty years employed as a bottler in wine vaults, and that his habits of free wine drinking had often nearly cost him his place. I was told that no objection was made to a bottler drinking as much wine as was good for him, and that complaint only resulted when so much was taken as to interfere with his efficiency as a workman. It is not easy to imagine a position more likely to produce a gouty state of system. We have since let this patient leave the hospital, supplied with a knee-cap. He still has some fluid in the joint, but he can walk without any pain. Exercise, which would of course be most injurious if the disease were strumous, will not hurt him.—*British Medical Journal.*

ERB ON THE REFLEXES.

Notes from one of Professor Erb's Lectures on the Diagnosis of Diseases of the Nervous System.

Although physiologists have busied themselves extensively with the study of reflex action in general, that branch of the subject which is of practical diagnostic value has been comparatively neglected. There is room for much valuable work even on the healthy subject, upon the reflex movements brought out by the stimulation of various parts of the body; and to the practical physician the subject is one of great importance.

The principal reflexes of diagnostic value are the skin, tendon, pupil, palate, and sphincter reflexes.

SKIN-REFLEXES. These are limited in health to certain parts of the body.

The reflex movement produced by tickling the sole of the foot is best seen in children and in "nervous" people. It varies greatly within normal limits, and with these variations it is necessary to become familiar before drawing diagnostic conclusions. This reflex is best tested by drawing the finger-nail or the handle of a percussion-hammer quickly from toe to heel. The result, as seen on the healthy man used for illustration, is a contraction of the quadriceps extensor. A slight contraction appears also in the muscles on the front of the leg, so that the foot is flexed as well as drawn away. In the foot itself no reflex is seen. This is the only normal skin-reflex about the foot, except sometimes a slight contraction when the dorsal surface is pinched.

Cremaster reflex. On stroking the anterior and internal surface of the thigh, a contraction in the cremaster muscle is seen to follow, by which the testicle is elevated. In a similar manner, the scrotal muscles contract when we pinch the skin of the scrotum. These contractions are, under abnormal

conditions, much decreased, and are normally more marked in boys than in adults.

The *abdominal reflex* is best tested with the patient lying down, as the abdominal muscles in the erect position are very tense. The abdomen should be unexpectedly stroked, and will immediately retract. This reflex is easily wearied by a few repetitions.

Mammillary reflex. In the normal subject, the nipple on being stroked becomes hard and elevated, that is, assumes a state of erection. At the same time the areola is drawn together.

Palpebral reflex is tested by approaching the eye quickly with the finger or by stroking the cilia. Under pathological conditions the conjunctiva may be touched to determine if palpebral reflex exist, though of course in health this stimulus is never necessary.

The foregoing are the only skin-reflexes found in the normal subject. In disease they may be wanting on the one hand or increased on the other, and new skin reflexes may be developed.

TENDON-REFLEX. The value of the tendon-reflex in diagnosis was discovered in 1876, since which time the literature on the subject has multiplied rapidly. This phenomenon is produced by the stimulation of certain tendons, for example, that of the quadriceps extensor femoris. That the reflex is produced by stimulation of the tendon, and not of the skin, is easily shown on animals by removing the skin over the tendon; on man, by pushing the skin over the tendon to one side and stimulating it. This reflex appears in the healthy subject on stimulation of the tendon of the quadriceps femoris, of the triceps, and of the tendo-Achillis.

Patellar tendon-reflex. This is by no means easy to demonstrate in all cases in which it exists. The knee of the leg to be tested is crossed over that of the other, and the leg allowed to hang down with no muscular effort on the part of the patient. This position is preferable to the recumbent, for in the latter position the tendon is relaxed, the reflex being in all cases best obtained when the tendon is slightly stretched. A short, sharp, light stroke is given with the percussion-hammer on the tendon, just below the edge of the patella. The result in health is a contraction of the quadriceps muscle. The great difficulty to contend against is involuntary muscular effort on the part of the patient. The phenomenon is in health almost constant; but, as it is wanting in $1\frac{1}{2}$ to 2% of normal subjects, its absence cannot be taken for an absolute sign of disease, which is an important fact to bear in mind. The patellar reflex may be, in disease, increased to such a degree that the least touch calls out a series of clonic contractions, or it may, on the other hand, be entirely wanting. It is wanting in tabes dorsalis, for example, and in atrophic paralysis, either of peripheral or of spinal

origin. It is generally increased in cases of spinal lesion in the dorsal region.

Reflex of the tendo Achillis is tested as follows: The foot is held at a right angle to the leg, in order that the tendon may be slightly stretched. The tendon is then struck lightly about $2\frac{1}{2}$ finger-breadths above the apex of the heel. A slight extension of the foot results in the normal subject. About the lower extremities there are no more normal tendon-reflexes, except sometimes a slight contraction of the abductors on striking the inner surface of the thigh.

Triceps reflex. This is called out by striking the tendon just above the elbow, the arm being held in a position of flexion. A slight reflex may be sometimes found in the biceps and in the flexors of the wrist, on striking their respective tendons. These reflexes are, however, very inconstant in health. In disease they may be very marked.

Here is a patient with an organic central lesion. He has a spastic gait, his legs are stiff, and he almost hops on his toes. In a patient with this gait we generally find exaggerated reflexes. On attempting to bend his knee we find a powerful resistance due to involuntary muscular contraction. We find an immense reflex following the slightest stroke on the tendon, not only below the patella, but even above it, over a triangular space which represents the spreading of the tendon. This reflex is in some cases so much exaggerated, that one stroke is followed by a series of clonic contractions.

In such a case as this one, the reflex of the tendo Achillis is best tested by holding the foot in the hand, with the thumb to the dorsum of the foot. The foot is now bent with a quick jerk towards the knee, and pressed firmly, though not too forcibly, upward. The result is a series of contractions, each relaxation being followed by a fresh stimulus as long as the foot is held firmly upwards. The fact that this stimulus is enough to keep up the reflex, is in itself evidence of a pathological condition. This phenomenon is in some cases best demonstrated by holding the foot in a position of abduction, in others of adduction. The phenomenon is almost never to be produced in health, though in persons with weak nerves two or three contractions may follow. When therefore, as in this case, a distinct series of contractions follow, a pathological state is almost surely diagnosed, probably an organic lesion in the cord or brain.

As we proceed in the examination of the case before us, we find that striking the inner surface of one thigh calls out contractions in the adductors of both thighs. A reflex also follows stimulation of the tendo tibialis postici as it passes the inner malleolus; also of the peroneal tendons as they pass under the outer malleolus; also that of the tibialis anticus as it passes over the ankle. Reflexes from the biceps and from the wrist flexors are

marked. In this patient the plantar, abdominal, and mamillary reflexes are well shown.

The number of muscles exhibiting the reflex phenomenon may be, in pathological cases, much increased; the deltoid, the scapular, and the dorsal muscles, for example, being included.

PUPIL-REFLEX is of great diagnostic value, and is exhibited in two ways: by narrowing on stimulation by light, and by widening on stimulation, for example, of the skin.

Pupil-reflex to light. The patient is placed facing a window, and the hand of the observer is placed over the eye. On the sudden removal of the hand, the slightest contraction of the pupil is noticed. The eyes should not be *closed* by the hand, or its removal may be followed by a contraction of the pupil, due to the effort of accommodation, which must not be confounded with the contraction due to the stimulation of the light. This accommodative effort of the pupil, which is not a reflex phenomenon, may be separately tested by directing the patient to look first at a distant, then at a near object.

Pupil-reflex to other stimulation than that of light. In sleep the pupils are very small. Let a person be suddenly awakened by a loud noise or other stimulus, and an extreme dilatation occurs. A similar dilatation may be brought about by a sharp stimulus to the skin. Let the patient look fixedly on a certain spot, say the observer's coat. If, now, the skin at the back of the patient's neck be pinched, a widening of the pupil ensues. The same reflex may be brought about by a strong faradic current, one electrode being placed at the back, and the other at the side of the patient's neck.

PALATE-REFLEX. While the patient is breathing as quietly as possible, with the mouth open, the palate may be touched with the end of a penholder. If the part is in the normal condition a retraction follows.

For the sphincter reflexes, we must depend in great measure on the history of the patient.

The reflex acts of coughing and sneezing may be tested if desirable, the former by powders blown into the larynx, or by observing the patient while choking, the latter by snuff or other irritating substances.

In pathological cases, a great variety of new reflexes appear, some following upon external stimuli, others upon natural acts of the patient. As an example of the latter, patients are seen in whom the passage of a stool is followed by clonic contractions in the muscles of the legs.

Among the many illustrations of reflex acts following external stimulus may be mentioned vaginismus, also micturition brought about by the pain of introducing a catheter. In one patient with decubitus, washing the sore always induced an act of defecation. An interesting example of abnormal reflex action was seen in the patient, who, though

paralysed from the neck downwards, made a movement with his arm to remove the catheter on every attempt at introduction.—*Lond. Med. Rec.*, Nov.

INFLUENCE OF ANTISEPTICS ON THE PERIODS OF AMPUTATION AFTER CRUSHING INJURIES.

CLINIC BY STEPHEN SMITH, M.D., NEW YORK.

The boy about to submit to amputation of the leg, entered the hospital about four days since, suffering from a crushing wound of the leg, received by the wheel of a street car. The statement of the boy, and of the bystanders, was that the wheel traversed the leg just above the ankle, and an examination proves that they are correct. The limb was completely crushed in all its tissues at that point. But it must be remembered that it is usual for persons falling before a car wheel, and receiving injuries, to suppose that the wheel passed over the limb, when, in fact, this rarely happens. Such persons are greatly excited and severely injured, and naturally have the impression that the wheel passed over rather than by the side of the injured part. The truth is, however, that the wheel usually pushes the limb before it, and crushes and lacerates its side and fractures the bones. You can determine the nature of the injury by examination. If the wheel has actually traversed the limb, it will be, as in this case, so thoroughly crushed that bones are comminuted, muscles reduced to a pulp, and arteries, veins, and nerves destroyed. The entire destruction of a limb when a car wheel passes over it on a rail, may be tested by experiment with the dead subject. In such a test you will find it somewhat difficult to make the car wheel mount over the limb; the tendency is to push the limb along on the track, and crowd it off upon one side. In this act the side of the limb will be lacerated and the bones broken, but the muscles, nerves, and arteries may be uninjured on the opposite side.

When called to a case of injury by the crushing effects of a car wheel, you should first examine to determine whether or not the wheel traversed the limb. If you are satisfied that it did pass directly over it, the limb cannot be saved; amputation is inevitable. If, however, you decide that the limb was pushed off the rail by the wheel, the question of amputation will be more or less doubtful, according to the nature and extent of the injury. In our time we can save limbs that surgeons formerly would not hesitate to amputate. As a rule, if the arteries and nerves are still intact, the limb can be saved. Disinfectants and plaster of Paris, judiciously used, will save the most unpromising cases of this kind.

But the question which chiefly interests us in connection with this question is this: Why was

the operation, when amputation was, from the first, inevitable, delayed to this critical period? It will be a sufficient answer to that question to state that the patient is in better condition for the operation to-day than he has been at any time since the injury was received. In explaining this statement, I wish to emphasize the fact that antiseptics, efficiently employed in these cases, greatly modify our procedures. When it was decided that the injury necessarily involved the loss of the limb, the patient was profoundly under the influence of the shock of the injury. His surface was pallid, his pulse small and rapid, his respirations hurried; he was restless, and large drops of sweat stood on his forehead. The first indication was, therefore, to restore him from the shock, which threatened life immediately. Stimulants, dry friction, and external heat were employed. The second indication was to dress the limb. The appliances used were these, viz.: The limb was laid on a rubber cloth, placed on pillows, and so arranged as to make a trough, which inclined downwards towards and beyond the foot of the bed. Above the limb a bottle was suspended, containing a three per cent. solution of carbolic acid, from which common candle wicking depended; the wicking was so arranged that the carbolized water constantly fell on the entire crushed wound, and the water ran off into a vessel at the foot of the bed. The object of this irrigation was to prevent putrefaction and inflammation.

The patient slowly rallied, and at the end of eighteen hours was warm, and in a favorable condition. Formerly, this was the period for amputation, for the danger which the older surgeons feared was the impending inflammation, which usually began in about twenty-four hours. But no prudent surgeon has subjected such a patient to the second shock, which results from an amputation, without a feeling of keen regret, and with intense anxiety. Too frequently has he been arrested in his operation by the announcement of his assistant that the patient was pulseless. Artificial respiration, hypodermic injections of brandy, etc., have rallied the vital forces so that the operation could be completed, and the patient removed to bed. But the revival was momentary. The nervous centres were too profoundly damaged to maintain their functions and death was inevitable.

Since carbolic acid has become so generally used in wounds I have ceased to regard time as an element in amputations. My attention was first called to the power of this class of agents to prevent inflammation, many years before carbolic acid came into use. A crushed foot came under my care, and it was doubtful whether an amputation would be required or not. I suspended the limb, and irrigated the wound with creasote water for ten days, during which time there was not the slightest evidence of inflammation in the part, nor

was there any fever. At the end of that period it was apparent that the foot could be saved, and only the simplest dressings were required to perfect a cure.

It is now a matter of every day's experience that carbolic acid constantly applied to crushed tissues, as in irrigation, will arrest all tendency, both to putrefaction and to inflammation. This boy is a striking illustration of the power of this agent to protect a patient from those secondary evils which occur to injured parts. For four days this patient has been recovering from the primary injury, without being in the slightest degree damaged by the local conditions. There has been no other fever than that of reaction from nervous prostration, and that passed off on the second day. He has been taking food freely, his sleep is sound and refreshing, his pulse is nearly normal, and in every respect he seems to be fully restored. The shock of amputation will now be comparatively slight; certainly will not be dangerous in the sense it would have been if I had amputated within twenty hours of the injury. But to guard him against the possibility of harm, he has been taking two teaspoonfuls of whiskey with milk, every hour for four hours, which has caused moderate exhilaration.

It is not absolutely necessary to amputate to-day, so far as the limb is concerned, for we can maintain it in this inert state for many more days, but the patient's general condition is entirely favorable, and as amputation is inevitable it might better be done now, and thus diminish the total length of time required for recovery.

The lesson which I wish to impress upon your minds is this, viz.: In crushing injuries requiring amputation, treat the lacerated parts with carbolic acid water applied by means of irrigation, and delay the operation until the patient is in a favorable condition to endure the shock. I need scarcely say that the same treatment should be adopted in similar injuries which do not require amputation, during the period of impending inflammation. But to be useful, the solution must penetrate the injured tissues, and to effect that it is often necessary to make incisions through the skin.

The leg was amputated below the knee with but slight shock, and the patient made a good recovery.—*Medical News.*

EXCISION OF THE KNEE.

BY P. J. HAYES, F.R.C.S.E.

Nearly ten years have elapsed since I introduced the practice of excising the knee-joint for chronic articular disease, of progressive character, at the Mater Misericordiæ Hospital. Previous to the period of my connection with the hospital, excision

of the knee had been performed in one instance, but the result was so unfortunate that every member of the medical staff became in a measure prejudiced against the operation. My success induced my *confreres* to adopt the operation, and I can unhesitatingly state that our practice throughout has been eminently satisfactory.

Calculating all the cases of excision which I have had under observation, my experience extends to more than forty patients, but in the following table I enumerate cases which have been treated solely by myself, and put up in the apparatus which experience of other methods caused me to devise. From this table of fourteen cases it will be seen that eleven recovered with excellent limbs. In three cases—where I was induced to operate against my own desire and opinion—secondary amputation was required; of these, one recovered, one soon died of phthisis, and one died within a week after the second operation.

From time to time I have read in our leading journals observations condemnatory of excision of the knee, the fatality after operation being high, and even when life was preserved the limb remaining in an unsatisfactory condition. Again, I have observed suggestions emanating from surgeons who believe success can be almost insured by preserving the continuity of the soft parts in front of the joint. I can only say that in my large experience of knee excision the greatest measure of success seemed to be due to performance of the operation and retention of the limb according to the method which I have advocated as well as practised.

My former papers may have been either unnoticed or forgotten—hence to-day I venture to repeat, with certain modifications and additions, my description, in the hope that other operators will be induced to pursue a method which is, in my opinion at least, the most likely to afford satisfaction and success. The steps of the operation for excision of the knee are too well known to render any lengthened account of the procedure needful. I usually flex the leg moderately, and, having defined the posterior margin of the femoral condyles, I cut from one of them to the other, straight across the ligamentum patellæ and into the joint. At this stage the patella may be dissected from its attachments, but if fixed to the femur its separation will probably be postponed until after division of fibrous connections between the femur and tibia. I prefer cutting through the lateral ligaments before proceeding to the division of either the normal or abnormal structures occupying an intra-articular position; also, when dealing with the latter, I keep the leg strongly flexed and direct the cutting edge of the knife against the articular surface of the head of the tibia, rather than towards the ligamentum posticum. I never attempt to clear the posterior aspect of either the femur or the tibia before applying the saw. I sever the bone from

before backwards, and break through the posterior surface of each bone. This is done with the view to avoid injuring the posterior ligament and corresponding fibrous connections between the femur and tibia, it being an advantage to preserve, if possible, these tissues, as they not only assist to maintain contact between the sawn surfaces, but also, should suppuration occur in spite of antiseptic dressings they will in all probability prove a barrier against the entrance and burrowing of pus into the popliteal space.

As the *raison d'être* of this communication refers to my method of putting up the limb, I shall describe in detail the steps to be adopted. Presuming that the operation will have been performed under an antiseptic spray, the spray should now be directed across the region of the knee, so as to avoid any unnecessary wetting of lint, bandages, etc. Carbolized sponges are to be maintained in contact with the angles of the wound, so as to absorb all blood flow whilst the leg and thigh are being washed and bandaged.

The surgeon next applies a soft flannel roller evenly, but loosely, around the limb, from the toes to a point about two inches below the inferior lip of the operation-wound, and over this a second roller is to be adjusted, thus providing the leg with a sufficiently thick and soft covering. In like manner the thigh from the groin to about two inches above the wound is to be loosely encased with a couple of flannel rollers. The limb being ready for application of the splint, the patient is to be brought *thoroughly* under the influence of ether so as to produce complete relaxation of the muscles. The splint consists of two concave pieces of perforated iron—the one moulded so as to fit the posterior aspect of the leg, and the other adapted to receive the posterior surface of the thigh, connected posteriorly by means of a strong, flat, but narrow bar of iron, so bent as to form an oblique step about three inches long, and having the end to which the leg-piece is attached exactly one inch in advance of that fixed to the thigh-piece. This apparatus is to be provided with pads arranged for leg and thigh—the leg pad being made thicker below than above—and then it is to be carefully adjusted behind the limb. A soft pad is now to be laid in front of the thigh near its lower end, and on this pad a concave piece of iron about four inches long, by from two and a half to three inches wide, is to be placed. Sometimes I lay a square of poroplastic substance larger than the concave plate of iron between the latter and the pad. The next step is to firmly secure the thigh in the upper part of the splint. This is done by encircling the splint and limb with a strong strap which is to be tightly buckled across the upper part of the anterior small splint, whilst lower down the strap of a Petit's tourniquet is to be fixed, the brass of the tourniquet resting against the anterior

HYDROLEINE OR HYDRATED OIL AS A THERAPEUTIC AGENT IN WASTING DISEASES.

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VALLEY OAK, KY.

From *New Remedies*, September, 1881.

In October, 1880, I read an advertisement of Hydroleine in some medical journal. The formula being given, I was somewhat favorably impressed, and procured two pamphlets: One on "The Digestion and Assimilation of Fats in the Human Body," and the other on "The Effects of Hydrated Oil in Consumption and Wasting Diseases." They are ably written, and afforded an interesting study. Their doctrines are so reasonable, that I got up faith enough to have my druggist order a sufficient supply to thoroughly test the merits of the preparation.

I was ready to catch at anything to take the place of cod-liver oil. In my hands it has proved an utter and abominable failure in ninety-five per cent. of all my cases in which I have prescribed it since I have been engaged in country practice, and it never benefitted more than forty per cent. of my city patients.

The inland people, who seldom eat fish, can rarely digest cod-liver oil. Almost every week I am consulted by some victim of the *cod oil mania*, who has swallowed the contents of from one to twenty-five bottles, and who has been growing leaner, paler and weaker all the while, until from a state of only slight indisposition, these patients have become mere "living skeletons." Nearly all complain of rancid eructations, and an unbearable fishy taste in their mouth, from one dose to another. They not only fail to digest the cod oil, but this failure overloads the digestive organs to such an extent that digestion and assimilation of all food becomes an impossibility, the patient languishes and pines and finally dies of *literal starvation*. In the comparatively small number with whom I have found cod-liver oil to agree, it has proved very gratifying in its results. In my practice, by far the largest number receiving benefit from it have been children. Those who have, previous to their illness, been accustomed, to some extent, to a "fish diet," will be more likely to digest the oil, and more notably so in cold climates. Still the innumerable efforts that have been made in the shape of "pure cod-liver oil," "palatable cod-liver oil," "cod-liver oil with pepsin," "cod-liver oil with pancreatin," "cod-liver oil emulsions," etc., and so on, *ad infinitum*, attest the fact that the great *desideratum* after all is to render cod-liver oil capable of retention by the stomach, and digestible when it is retained.

As Hydroleine is partially digested oil, and this partial digestion is brought about by a combination of factors suggested by actual physiological experiments, these facts commend it to my confidence, and a trial of the preparation in seven typical cases convinces me that it possesses

a high degree of merit, and I feel that it is a duty incumbent upon me to call the attention of my medical brethren to the subject.

The first case in which I prescribed it was that of a married lady 28 years of age, a blonde, and the mother of four children, the eldest 9 and the youngest 1 year old. From the birth of this last child she dated her illness, for she made a tardy convalescence, remaining unable to walk for a month. Soon after she began to grow weaker, and soon resumed her bed, which she had not left to any extent since, not at any time being able to sit up longer than fifteen or twenty minutes. During all this time she was under charge of a skillful physician. He had tried many remedies to check the rapid emaciation: among these were several different brands of malt extract, cod-liver oil, and various mixtures of the oil. None of the oils and their mixtures agreed with her. In March, I was called and prescribed Hydroleine, a bottle of which I delivered at the time, directing her to commence with teaspoonful doses, to be gradually increased to twice the amount. It agreed with her finely, and by the time the first bottle was used she was greatly improved. She procured and used two additional bottles, and, at this writing, June 15th, is considered well.

The above case was one of general and persisting emaciation, unaccompanied by any cough or perceptible thoracic trouble. The ensuing case was one of diagnosed

TUBERCULAR PHTHISIS.

The patient a married lady, æt. 32, had been married about 14 years, and was the mother of six children, the youngest two years of age. Several of her sisters had died of the above mentioned disease. Her medical adviser prescribed cod-liver oil, and she had taken a full dozen bottles with plenty of whiskey. The oil had not been digested, although it had been retained by the stomach. Her cough had grown constantly worse, and she grew rapidly weaker, week by week. I prescribed Hydroleine for her, and she commenced to take it in April, about the 15th. It agreed with her finely. She rapidly gained weight and strength, her cough was relieved and has now nearly ceased. She has used nearly four bottles, and continues to use it, though apparently well.

I have prescribed it in three other cases, in two of which the results have been equally gratifying, but in the other case it produced nausea and greasy eructations.

From these trials I am led to think quite favorably of the hydrated oil, and I am led to believe that although it may not agree with all, it will be found of great and permanent benefit to a very large per cent. of consumption and other "wasting" diseases, and that it is destined, at no distant day, to very largely supplant the undigested oils.

HAZEN MORSE, 57 Front Street East,
TORONTO.

SOLE AGENT FOR CANADA.

TUBERCULOSIS RESULTING FROM DEFICIENT NUTRITION.

(From *The Medical Record*, New York.)

Various as are the opinions regarding the treatment of consumption, all writers concur in the belief that whatever measure is adopted, the strength of the patient must be husbanded with the greatest care, and the most efficient means employed to supply the system with that element which the symptoms indicate as being required to keep up the vitality while such course of treatment is being pursued as is considered suitable. The most striking indication of the presence of this dreadful disease is rapid loss of weight. The patient himself, prone as he is to disregard premonitory warnings of this insidious malady, cannot but observe an extraordinary difference in the appearance of his form, as first the face, then the trunk and, lastly, the limbs become soft and flabby, and the once well-fitting garments hang loosely about him, his flesh seeming to melt away, so rapid is the change.

EMACIATION.

A natural course of reasoning as to the cause and effect of emaciation under these circumstances has developed the fact that the abnormal consumption of the tissues is the result of nature's efforts to supply the waste, through the blood from the fatty tissues of the body with the requisite amount of material whose oxidation is the source of heat and nerve force, the natural supply, through the assimilation of food, having failed in consequence of an unhealthy condition of the pancreatic secretions causing an insufficient supply of chyle, or a failure on the part of the lacteal tubes, through fever or some cause, to absorb sufficient nutriment.

TUBERCLE.

As the attack upon the tissues of the body progresses, not only fatty tissue is absorbed into the circulation from unnatural sources, causing loss of strength, but particles of albuminoid tissue are carried by the blood and being deposited in channels where the system has no provision for throwing them off, form desquamations centres of disease which, in their turn, throw off infectious matter to be absorbed into the general system. The immense extent of delicate mucous surface in the respiratory passages of the lungs exposed to the contents of the minute blood-vessels which permeate their entire texture, offers the greatest and most susceptible field for the reposition of a large amount of this effete albuminoid tissue. This deposit forms the tubercle whose establishment in the lung is the beginning of that train of circumstances which characterizes the progress of that fatal malady—consumption. Thus it is seen that tuberculosis is either due to the defective action of the pancreatic juice on the fatty elements of the food, or to the non-absorption of the chyle into the blood.

ASSIMILATION OF FATS.

Fatty matter, when introduced to the stomach, undergoes little change by the action of the gastric juice, but passes, together with

the chyme or digested fibrinous and albuminous matter, to the duodenum, where it comes into contract with the pancreatic juice, and is thereby transformed into chyle, which is a very delicate saponaceous emulsion or suspension of the oleaginous portion of fat. It is when in *this condition only* that fat is capable of absorption by the lacteals, thence passing directly to the venous blood which is supplied to the lungs through the right cavity of the heart; the lungs then absorb from that blood the hydrocarbons or fatty portion, and return the nitrogenous portion to the heart, to form the globulin of arterial blood before passing into the circulation.

This function of partly saponifying and partly emulsifying fats is enjoyed by no other secretion of the alimentary canal but the pancreatic juice, unless we take into consideration the action of the saliva, which is somewhat of that nature; but as the food in most instances is subjected to the action of the saliva in the mouth for so short a time, this feature in the economy is almost inappreciable.

TREATMENT.

The close relations of non-assimilations of the fatty elements of food to wasting diseases, and especially to consumption, is understood, and reason would indicate that if by any artificial means the absorption of fat could be assisted by supplying, as chyle, a proper amount of oleaginous or fatty matter, a nutritive progress would be established which would modify the unhealthy action of the pancreas, and not only relieve the body from the depleting effects of the disorder, but afford an opportunity for treatment and recovery. With the assistance of a thorough knowledge of the chemical process which fat undergoes from the time of its introduction into the duodenum to absorption, a preparation has been introduced and extensively used by the profession in England with highly successful results, indicated by the very flattering commendations of it from many physicians who, having given the treatment of pulmonary disorders their special attention, are peculiarly qualified to attest its efficacy.

HYDROLEINE.

This preparation, to which the distinctive name of hydroleine (hydrated oil) has been given, is not a simple emulsion of cod-liver oil, but a permanent and perfect saponaceous emulsion of oil, in combination with pancreatin soluble in water, the saponification producing a cream-like preparation, possessing all the necessary qualities of chyle, including extreme delicacy and solubility, whereby a ready and perfect assimilation is afforded.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonfuls, equal to 120 drops, contains:

Pure oil.....	80 m (drops)
Distilled water	35 "
Soluble pancreatin.....	5 grains.
Soda.....	3 "
Boric acid.....	1 "
Hyocholeic acid.....	1-20 "

Dose.—Two teaspoonfuls alone, or mixed with twice the quantity of soft water, wine or whiskey, to be taken thrice daily with meals.

The use of the so called emulsions of cod-liver oil during the extremely sensitive condition of the digestive organs always accompanying consumption does not usually afford beneficial results. Those of the profession in this country who have under their care cases of consumption, diabetes, chlorosis, Bright's disease, hysteria, and, in short, any disease where a loss of appetite is followed by a rapid breaking down of the tissues of the body in its effort to support the combustion supplying animal heat, are urged to give this preparation a trial. It is supplied by the agent for Canada, Hazen Morse, No 57 Front Street East, Toronto, who will forward literature relating to the subject upon application.

That many of the diseases from which mankind suffer during infant and adult life are caused by malnutrition, there can be no doubt; and the extent to which non-assimilation of the life-giving properties of food interferes with recovery from severe illness, baffling the best directed efforts of the physician, points the necessity for an agent or combination of agents sufficiently potent to replace the deficient principle and aid nature in renewing the degenerated tissues.

Realizing this need, the science of chemistry produced pepsine. Richard Tuson, F. C. S. Professor of Chemistry, London, England, in the *Lancet* Aug. 13, 1870, speaks of this remedy as follows: "Since the introduction of Corvisart and Boudault's *poudre nutritive* into medicine, in the year 1854, Pepsine, obtained from the stomach of the pig, calf or sheep, in a state of greater or less impurity has been extensively prescribed in Dyspepsia and certain other affections. According to the testimony of some authorities of high standing, long experience in the use of this agent fully justifies Corvisart's predictions relative to its therapeutic value, which were based on physiological reasoning.

There are other authorities who express doubts as to the efficacy of Pepsine. This difference of opinion undoubtedly arises from the circumstance that pharmacologists supply medical men with various preparations, all bearing the same specific name of Pepsine, but differing very considerably in their digestive powers and other qualities. In fact, I find those who speak favorably of its employment in the treatment of disease have prescribed that prepared by the best makers, while those who express a doubtful opinion have been in the habit of prescribing those varieties or makes, which the experiments of myself and others have proved to be practically without any digestive activity, *i. e.* worthless. Under these circumstances it is *absolutely* necessary for the practitioner to be certain of the *make* of Pepsine he uses. *Pure* Pepsine, thoroughly triturated with finely powered sugar of milk (saccharated pepsine) will undoubtedly produce the best results.

Experience in diseases of the stomach, dyspepsia, etc. has demonstrated in many cases, the lack of other agents required to promote a healthy digestion beside Pepsine, namely Pancreatine and Diastase or veg. Ptyalin. Pancreatine the active principle of the sweet-bread or pancreas possesses the wonderful power of emulsifying the fats and oils of food, rendering them easily assimilated by the system not affected by pepsine in the slightest degree. Diastase or veg Ptyalin, as obtained from malted barley in the *dry* extract of malt, represents the saliva, and has the remarkable property of converting the insoluble starchy portions of food into the soluble glucose, thus rendering the indigestible and innutritious article starch into the nutritive and easily assimilated food glucose.

The value of these different ingredients and the difficulty of procuring them of the right quality led Hazen Morse, 57 Front Street East, Toronto, to experiment with various combinations during seven years' employment in the manufacture of Pepsine on a large scale and with the assistance of several prominent physicians he was finally enabled to present to the profession the following formula.

Saccharated Pepsine.....	10 Grains.
" Pancreatine.....	5 "
Acid Lactophosphate of Lime	5 "
Exsiccated Extract of Malt equal to one teaspoonful of Liquid Extract of Malt	10 "

Said formula has been registered at Ottawa under the distinctive name Maltopepsyn, thus giving the physician a guarantee of always procuring the same standard preparation and preventing their being imposed upon by imitations of inferior quality, and at the same time putting it at as low a figure (fifty cents for 1½ ozs.) as possible for such a formula to be compounded from the ingredients of the *best* possible manufacture.

Maltopepsyn has digestive power ten times greater than the best Pepsine in the market, as it digests Fibrin and Caseine, emulsifies the fat of food taken into the stomach, thus rendering it assimilable, converts starch into glucose, in fact it combines all the agents that act upon food, from mastication to its conversion into chyle, digesting all aliment use by mankind while Pepsine acts only on plastic food. Maltopepsyn also combines with the above the nutritive qualities of Extract of Malt, and the brain and nerve strengthening powers of the Acid Phosphates.

It has been found that a free acid, like Hydrochloric, does not combine well with a Saccharated Mixture, and renders it liable to decomposition, I therefore do not use it in my formula. It can be easily prescribed in solution, (say 20 drops of acid to 4 ounces of water) one half-ounce with each dose, in cases where its use is indicated.

For infants, however, Maltopepsyn will be found to yield the most satisfactory results, and the acid should be dispensed with. The necessity for the absence of acid which would tend to produce harmful results, will be recognized, when it is considered that even the slight acidity of most cow's milk, when used as food for infants, is sufficient to disagree with them.

With regard to the proper time for its administration, as before or after taking of food, opinions vary, but reason would suggest that about half an hour before eating will afford the ferment a sufficient time to combine with the existing condition of the stomach, and produce the most natural effect upon the food.

OPINIONS OF MEDICAL MEN.

46 St. Joseph St., TORONTO, Aug. 19, 1881.

I have tried both Maltopepsyn and Hydroleine in a large number of cases and have found very great benefit from their use. Maltopepsyn is one of the best remedies of its kind that I have ever prescribed when artificial aid is required for digestion. Hydroleine I have found to be one of the best, if not *the* best of its class. It is readily taken, is easily assimilated, does not produce nausea or disgust, and nourishes the body to a very marked degree. In all wasting diseases I have found it to be most satisfactory. I would strongly recommend both of these preparations to my professional brethren.

JAS. H. RICHARDSON, M.D.,
M.R.C.S., England.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have given a very fair trial to your preparations Maltopepsyn and Hydroleine. I found Hydroleine invaluable in all wasting diseases, where cod liver oil and other tonics are generally employed, and especially in treating some cases of chronic diseases of the skin.

Maltopepsyn has been used successfully in two cases of Dyspepsia.

Yours truly,
GASPARD ARCHAMBAULT, M.D.,
Physician to the Hotel Dieu and Professor of Dermatology at the Medical and Surgical School.

MONTREAL, Sept. 12, 1881.

Dear Sir.—I think I have employed Hydroleine since its first introduction here, and it has given far more satisfaction in my hands than any other Cod Liver Oil preparation, in cases of emaciation with cough and threatened consumption its use has invariably been followed by benefit and in many cases results have been truly remarkable. Increase in weight, improved secretions and better spirits usually follows its proper administration. In chronic diarrhoea I have found it very serviceable and for many convalescents it is invaluable.

Yours truly, W. B. BURLAND, M.D.

MONTREAL, Sept. 28, 1881.

Dear Sir.—I have used Hydroleine very freely and find it a very good tonic in all wasting diseases, principally those of the pulmonary organs.

Yours truly,
P. G. MOUNT, M.D.

Physician to the Reformatory Jail, Montreal.
690 Dorchester Street, MONTREAL, Sep. 29, 1881.

Sir.—I have much pleasure in adding my own to the mass of testimony you have already acquired in favor of Hydroleine, with the results of which I have never been disappointed. Its administration has frequently been attended with an increase in the patient's weight far out of proportion to the quantity of oil taken.

Yours truly,
A. LAPHORN SMITH, M.D.
M.R.C.S., England, F.O.S. Lond.,
Physician Montreal Dispensary.

531 Wellington Street, MONTREAL, Sep. 19, 1881.

Dear Sir.—What I have seen of Hydroleine is certainly to its advantage. In the first place you do not, as is done to my knowledge in other preparations, endeavor to cover up deficiencies of the oil by adding strong aromatic oils to the mixture, and again, I consider the formula more likely to secure a finer emulsion by reducing the size of the globules than is possible under other methods.

Yours truly,
CASEY A. WOOD, M.D.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have much pleasure in testifying to the excellence of your Maltopepsyn in cases of indigestion and the diarrhoea and the vomiting of children. Beyond question it is the most successful remedy we possess in the above class of cases, particularly so in young children, doing away entirely with the very objectionable habit of administering very powerful astringents, including opium. Your preparation in these cases is prompt in its action and above all harmless.

Yours very truly,
JOHN T. FINNIE, M.D.

MONTREAL, Sept. 19, 1881.

Dear Sir.—Having occasion to prescribe Maltopepsyn often, it is with the greatest pleasure that I inform you of its entire satisfaction to the relief and cure of all those troubles which accompany dyspepsia, gastralgia, pyrosis and flatulency; it has also cured costiveness. In all these complaints I am well pleased with the use of this wonderful remedy.

Yours very truly,
J. C. DANSEREAU, M.D.

126 Bleury St., MONTREAL, Sept. 12, 1881.

Dear Sir.—I have used Maltopepsyn in a great number of cases with beneficial results and think that it is a very valuable preparation.

Yours truly,
R. A. KENNEDY, M.D.

NEW DURHAM, ONT, Oct. 1, 1881.

Dear Sir.—I prescribed Hydroleine to a patient afflicted with tuberculosis. She is wonderfully emaciated; nevertheless, from the use of the one bottle she has gained $1\frac{1}{2}$ lbs., her cough has become less frequent, and she expressed a great desire to continue the use of the remedy. I write you for 4 (four) bottles to be sent immediately.

Yours very respectfully,
A. McCURDY, M.D.

UPPER BEDFORD, QUE., Sept. 28, 1881.

Dear Sir.—For the past 12 months I have used Hydroleine (Hydrated Oil) in *all* my cases presenting either a scrofulous or tubercular diathesis, and have found it answered better than any other preparation of cod liver oil. Notably with children (of all ages) do I find its *particular value*.

In suitable cases your Maltopepsyn has never failed me, and in certain cases of long standing dyspepsia, its use I found indispensable.

Yours truly,
DAVID A. HART, M.D.

splint. As both straps will have been drawn extremely tight, it is clear that one or two turns of the tourniquet will firmly press back the lower end of the femur, so as to render the anterior surface of that bone flush with the anterior surface of the tibia.

Entrusting the upper part of the limb to his assistants, the surgeon next proceeds to encase the foot in several turns of a gypsum bandage, which is to be carried upwards encircling the leg and lower part of the splint as high as the point at which the flannel bandage terminates. While this is being accomplished the foot must be held at right angles to the leg, lest extension of the ankle should occur and prove a source of trouble at a later period. When the operator will have satisfied himself that the limb has been properly arranged and secured, the wound is to be closed, while drainage is to be provided by having short, flanged tubes inserted, either at the angles of the original wound or through button-hole apertures which may be made still further back. After the application of antiseptic dressings the limb is to be swung by means of a loop of calico passed behind the leg-piece of the splint and tied to the bars of a strong and high fracture cradle. It will be seen that my apparatus forms a light, portable, but extremely secure, means for fixing the limb. A foot-piece is altogether unnecessary, as the gypsum bandage encircling the leg and splint constitutes a firm boot. Shortness of the thigh-piece, combined with suspension of the leg, enables the patient to assume a sitting posture and change position without risk or discomfort.

I have frequently encountered cases of articular disease where the morbid affection seemed limited to the soft structures, but where complete exposure of the bony surfaces disclosed the presence of localized caries and of suppuration in the osseous tissue. This fact alone would determine me against attempting to perform excision by making the comparatively small lateral incisions recommended by some surgeons. Moreover, an unwounded state of integument in front of the knee cannot prove of any real advantage to the patient, as the rule, in my experience, has been for the central portion of the operation wound to unite by the first intention, whilst at the time of putting up the limb the surgeon is enabled clearly to see as well as to feel, and of course to regulate, the respective positions of femur and tibia.

Whenever I have to deal with a cavity in the cancellous tissue of either the tibia or the femur, I scoop the space clear in the first instance, then by means of a small piece of fine sponge wetted with chloride of zinc solution (gr. 20, ad 3 i.) I mop the cavity thoroughly—in many cases I have judged it necessary to drill the bone, so as to make a free counter-opening from the deepest part of the bone cavity in the track of the operation-wound.

I never sponge a wound in the soft parts with chloride of zinc solution, for I have found the salt to cause a considerable flow of blood-stained serum, calculated to prevent union by adhesion. I always arrest parenchymatous bleeding (which is sometimes inconvenient after the removal of Esmarch's bandages), by applying to the wound a succession of sponges squeezed out of *very* hot carbolic solution, after the method proposed by Dr. P. Browne. This proceeding will control oozing from the bone surfaces, as well as from soft textures, and it in no way tends to interfere with the early development of repair. I have never seen bleeding from a large nutrient artery in bone, but if the surgeon should encounter such, I think hæmorrhage could be at once arrested by plugging the canal with a pointed piece of decalcified bone cut from one of Neuber's drainage tubes.—*Dublin Journal Medical Science*, Feb.

ACUTE ABSCESS IN THE NECK.

CLINIC BY S. W. GROSS, M.D.

You will observe in this young man, who is apparently about nineteen years old, a decided swelling, which takes up a large portion of the anterior triangle of the neck, that triangle which is bounded in front by the median line of the neck, behind by the sterno-cleido mastoid muscle, and above by the body of the lower jaw.

As to the history of this tumor, the patient says it began two weeks ago, apparently without any assignable cause, and has continued increasing gradually in size till the present time. We observe that the overlying integument is markedly discolored, and of a dusky red appearance. He complains also of pain of a throbbing character, which is increased at night when in the recumbent posture. Upon examining the swelling we find that it is soft, that there is fluctuation, and that immediately over the body of the mass is felt a distinct pulsation, which is synchronous with the beats of the heart. Do not be led astray by this symptom of pulsation, it is merely the result of the coincident that the swelling immediately overhangs the carotid artery. This is not an aneurism, and why? The pulsation is conveyed to the swelling from below, and is distinguishable only by placing the hand over the body of the mass, but it is not felt when the fingers are placed upon its opposite sides, as would be the case were the tumor an aneurism. Then, too, the aneurismal thrill is absent, and the discoloration is not that of a bloody tumor.

In all cases of this kind, no matter how certain the diagnosis may appear, before recourse is had to the knife the exploring needle should be used. The most careful observer may at times be mistaken. Some years ago a prominent surgeon in

Edinburgh saw a tumor situated below Poupart's ligament, which had been diagnosed by other and equally prominent men to be aneurismal; but his opinion differed from the rest. He was confident that it contained pus. He plunged in his bistoury and found it as he had anticipated. Again, he saw a tumor in the anterior triangle of the neck, which others had also pronounced aneurismal, but which he conceived to be the same as the one first seen. He opened it and caused the almost instantaneous death of his patient, and he himself was found dead the next morning in his office, so great was the impression the case made upon him. Remember this story and never forget to use the exploring needle; it will some day reward you handsomely.

A very good way of opening an abscess in the neck is to introduce an exploring-needle, and then to pass in the bistoury upon its groove. In this manner you are pretty sure not to wound important structures, while at the same time a good, free opening is unhesitatingly made. The pus should be allowed to flow by atmospheric pressure.

The discharge from this abscess (which is a large one) is quite abundant, and the amount of suppuration which will take place in the next few days will give rise to considerable constitutional weakness. We will therefore put him on the tonics of quinine and the tincture of the chloride of iron, giving from seven to ten grains of the former, and from thirty to forty minims of the latter during the twenty-four hours. An emollient poultice will be applied for the double purpose of keeping up a free flow of pus and of preventing the opening we have already made from closing.—*Med. and Surg. Reporter.*

HYSTERICAL AFFECTIONS OF THE LARYNX.

Hysterical Aphonia is caused by paralysis of the muscles of the larynx. The muscles most commonly seized are the vocal muscles. Nevertheless, paralysis of the posterior crico-arytenoids is not absolutely rare, and we have known a case of this kind in which a hysterical female has been twice tracheotomized. A primary symptom of hysterical paralysis is that it is frequently bilateral, or else the paralysis is one-sided, but complicated with paresis or contraction of the opposite muscle. Thus hysterical aphonia is often complete. It is, besides, a common enough occurrence, this diffusion of hysteria in organs which are impaired, and which are not symmetrical, as the ovaries. A second symptom of hysterical aphonia is that it frequently gives a laryngoscopic image differing the one day from the other. A third characteristic is to leave the cough intact, which even gains in intensity and breaks forth into roaring. We have even seen some cases of hysterical aphonia where

the patient could sing, and some who could speak in their dreams.

SPASM OF THE LARYNX.

The hysterical laryngeal spasm has its characteristics which distinguish it from the spasm of infancy, from the spasm from an irritation of the vagus nerve or of the recurrent, and from the spasm from the introduction of a foreign body into the larynx. This spasm is expiratory or inspiratory. The expiratory spasm is nothing else than the whimsical cough of the hysterical, a symptom common to nearly every hysteric, but one the most painful. In a boy 14 years of age we have counted as many as twenty-five coughs per minute during weeks. This child was cured by a heavy rain which overtook him during a walk, and to which he was exposed for two hours. At other times the hysterical cough is cured by the intercurrent affection which has been its primary cause. We know the fortunate consequences of the cure of uterine maladies from the hysterical cough. This hysteric cough was the cause of many errors being made before the laryngoscope had unveiled the exact state of the larynx. When it is met with in young girls associated with supplementary hemoptysis, it gives rise to a prognosis of which the gravity is only apparent.

LARYNGEAL HYPERÆSTHESIA.

Hysterical laryngeal hyperæsthesia is very common. It is perhaps the most frequent manifestation of hysteria in the larynx. It is sometimes diffuse, and manifests itself by various sensations—sensations of burning, tearing, pulling, going from the throat to the sternum, sensations of a foreign body. Who does not remember being called out in great haste to see a woman who had swallowed a pin, a fishbone, etc., and who was in the greatest agony. After a conscientious examination, we find that the patient has been mistaken by a false sensation, and that we ourselves have been the victim of a false alarm. But it is not always easy to convince these same subjects that it is not a rare thing to find among them veritable cases of laryngeal hypochondriasis.

LARYNGEAL ANÆSTHESIA.

The result of our inquiry on this subject is that only in one-sixth of hysteric patients we have met with more or less complete anæsthesia of the epiglottis. It is the epiglottis which is frequently attacked by anæsthesia, and frequently to the exclusion of every other part. Anæsthesia may have completely mastered the whole of the larynx, and be absolute. Generally it is bilateral, and is not limited to any well-defined nervous territory. This characteristic sometimes sufficiently distinguishes it from other anæsthesias, which are as extensive as one of the areas of one of the superior laryngeal nerves, such as diphtheritic anæsthesia. Another important and special characteristic of this anæ-

thesia is that it is frequently associated with a cutaneous patch of anæsthesia on the front of the neck, a peculiarity already noticed with reference to hysteric aphonia. The simple introduction of the mirror is sufficient to cause many of these anæsthesias to disappear.—*Edin. Med. Four.*

FREEDOM IN CONSULTATIONS.

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It was hardly supposed when the code was adopted, giving freedom of action to every man regarding consultations, that there would be a lack of opposition to the movement by outsiders. Whenever an old rut is left and a new road projected, the first passengers generally have a rough time of it. They must expect this, and bounce over the old prejudices as best they can. In so far, perhaps, the State Society has in a measure, come to a realizing sense of the radical character of its recent departure. But as yet there is no sign of weakening as to the stand taken. In reality, there is no good reason why there should be. Far from being in the wrong, the profession of this State have taken a much-needed step in advance. The cry that concessions have been made to irregular practitioners is simply absurd. The assertion that the honor of the regular profession has been sacrificed to the mere expediency of obtaining extra consultations is ridiculous. The profession of this State have a birthright which has never been for sale for any such price. The action regarding free consultation was based solely upon the principle that medicine was a broad and liberal profession, and that every barrier which interfered with the expansion of its usefulness and the increase of its influence should be broken down. The soundness of this doctrine cannot be questioned even by the most contumacious sticklers for the National Code. The best reason for rebuking bigotry and dogmatism is to be found in the fact that we are free from any suspicion of them ourselves. And this results when the opportunity is given to every one desiring it to search for truth wherever it may be hidden, and in his own way. * * *

Of course we hear all sorts of absurd things concerning the desertion of the old flag, of going over to the enemy, of acting in defiance of all the principles of right and justice regarding professional associations, and of doing many other terrible things tending to encourage quackery. But in reality the State Society has only done a common-sense thing. It merely states that any medical man who chooses to act according to his best judgment in consultation with any honest practitioner whatsoever, can do so without being subjected to discipline for such opinion's sake. He is not recommended to consult with any one whom he may consider an improper person; he can refuse to consult with any one, regular or irregular, if he

pleases so to do. No effort is made, directly or indirectly, to do aught to recognize quackery in any of its forms. Certainly the honor of the profession can as safely be trusted, perhaps, in the working out of this apparent problem of requisite qualifications for consultation as in a blind obedience to the dicta of any committee on ethics. * *

We repeat that the Medical Society of the State of New York has done nothing of which it may be ashamed. It can take nothing back, so far as freedom of consultation is concerned. The stand taken is an eminently proper one, and we hope it will be persistently maintained, even at the risk of non-representation in the American Medical Association. It will, in any event, be only a question of time for the Association itself to follow the example of the Society of this State. The free and progressive spirit of medicine can no more be trammelled by foolish restrictions as to the conduct of its members than can its grand principles be made to revolve upon doctrinal points, or its legitimate aspirations be controlled by mere sectarian influences. The religion of medicine is as broad as humanity itself, and should compass it at every point; its faith, founded on facts in science, should reach out in every direction for new strength; and its mission to cure the sick should not stop short of the use of every means within honest reach. The darker the places beyond, the higher we should raise our torch, and the more persistently and earnestly should we press forward. The Medical Society of the State of New York has striven by its recent action to give such a doctrine its most liberal interpretation, and such a faith its most practical turn.—*New York Medical Record, April 15th, 1882.*

UTERINE DISPLACEMENTS.

Paul F. Mundé, M.D., in the (*American Journal of Obstetrics*, Oct. 1881), gives the following conclusions deduced from his large and varied experience:

1. Recent displacements of any variety are the only cases which offer a fair chance of complete recovery by any of the mechanical means at our disposal.

2. Of these means pessaries are the most convenient for temporary relief, but only in a small number of cases does permanent cure result.

3. The best curative means of support of the displaced uterus is probably the systematic and intelligent use of vaginal tampons, impregnated with a mild astringent solution.

4. Posture, while excellent as a means of relaxing the uterine supports and relieving pelvic congestion, is by its inconvenience at best but a means of temporary relief.

5. Permanent relief, cure, can be expected and

will be obtained only when the displacement is of recent origin, especially when it has been produced by some sudden physical shock; or when the complete tissue-metamorphosis accompanying puerperal involution aids in restoring to the uterine supports and the uterus itself their original and healthy tone. This fortunate occurrence must be looked upon as decidedly the exception, since the favoring circumstances above mentioned are but rarely met with, or the displacement is seldom recognized at a sufficiently early date to permit of a perfect restoration to health.

6. The most favorable period, therefore, for the treatment of a uterine displacement, or distortion with a view to a permanent cure, is within one or two weeks after delivery, before the woman has left her bed.

7. The excitation of a certain amount of plastic exudation in the walls of a flexed uterus may, if kept within bounds, result in a permanent straightening of the organ. This may be accomplished by rapid dilatation, or by the protracted wearing of stem-pessaries, but permanent success will at best be rare.

8. The protracted use of astringent vaginal tampons introduced daily, offers for some cases of ante and retro-displacement an excellent, and for most cases of procidentia, almost the only efficient and safe remedy for the displacement, far superior to all steadily worn hard or soft pessaries. A procidentia may even be cured by several months of this treatment, if the affection be not of too long standing.

9. While permanent cure is only occasionally met with, so much relief is afforded by pessaries and the other mechanical supports and methods above discussed, they should in no case be discarded unless all treatment be contraindicated.

10. Electricity, if rationally and scientifically applied for a sufficiently long period, offers chances of cure of comparatively recent cases, which call for a more thorough and persistent trial of the method.

11. For prolapsus uteri et vaginæ, unless of quite recent origin, an operative constriction of the vaginal canal and a restoration of the relaxed or destroyed perineum to its normal state is the only sure means of cure, and even for this affection the unfailling method remains to be discovered.

12. The cure of a flexion by operative (bloody) treatment is impossible. The canal may be made comparatively straight by a division of one or both lips of the cervix, but the flexed condition of the organ still remains. Only by gradually increased elevation of the fundus by a vaginal pessary (best Thomas' cup) after delivery, or by the protracted wearing of an intra-uterine stem, and that only in a small proportion of the cases can a permanent cure be effected.

PROFESSIONAL LIBERALISM.

View it as we may, there can be no doubt that in ethics the profession of medicine is much less conservative than it was a few years ago. Progress is so gradual that those who live during a period of changes fail thoroughly to realize them, since they come one by one, allowing time for custom to breed familiarity with the first before the second follows on its heels. If, on the other hand, the spirits of Astley Cooper, John Hunter, Chapman, Dewees, Jackson, and Physic, could return for a short time to their ever remembered localities and duties, think for a minute what they would see. Their eyes would become round with amazement, as they read of the utterances of distinguished English physicians, in favor of admitting homœopathies to their consultations. They would see the wife of the distinguished editor of one of our greatest journals herself a distinguished and cultivated physician. They would stand aghast when they heard that the medical profession of one of the greatest States in the world had rendered it officially proper to consult with a sect, the members of which they, in their day and time, avoided and shunned, professionally, with as much or even more care and assiduity, than they did the devil himself.

They would find physicians in good standing officiating as teachers in medical colleges for women. They would be informed that several medical societies of repute had opened the door of membership to female physicians. In time their unsophisticated minds would awaken to the various devices used by their modern confreres to secure practice, and they would be almost paralysed when they learned how much wire-pulling and political intrigue had entered into their beloved profession.

We do not mean to say that this is not all right. We are champions of progress, and rejoice when we see human nature advancing. We merely desire to enable our readers to enjoy with us the real amusement that would be afforded by the puzzled and half incredulous expression that would occupy the faces of these old medical war horses were they enabled to see and hear what we do, and to watch them throw up their hands in astonishment, as they exclaim, "*By the shade of the great Hippocrates, but this is an age of progress,*" as they vanish from sight into the dim mist of uncertainty, born of their doubts as to whether all this seeming progress will redound in the end, to the real and substantial advantage of their ancient profession.—*Med. and Surg. Reporter.*

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 VENEREAL AFFECTIONS IN GUATEMALA. — According to the *Diario de Centro-America*, an official examination of the public women of Guatemala proved that over ninety-five per cent. of these unfortunates were in bad health.

CASCARA SAGRADA FOR CONSTIPATION.

Dr. Boardman Reed (*Med. Bulletin*) says:—For the past two years I have been making constant use in my practice of the fluid extract of Cascara Sagrada (*Rhamnus Purshiana*) for chronic constipation. It always affords relief in even the most obstinate and inveterate cases, and often seems to effect a permanent cure. My methods of using it are as follows: For persons who do not object to the intense bitter taste of the medicine in plain water, I order a two-ounce bottle of the fluid extract, with directions to begin by taking ten drops in a wineglass of water before each meal. If within two or three days this does not produce a regular natural evacuation every morning, the patient is told to increase the dose by two or three drops every day until the required effect is produced; then to continue with that amount regularly three times a day for a week or ten days. At the expiration of this time, I advise that the dose be decreased again by taking one drop less every day, until it is reduced to nothing. Then, if the habit of soliciting a movement punctually at a regular time every morning is kept up, there is usually no more difficulty. In many cases the initial dose of ten drops three times a day is quite sufficient. Occasionally it is found too much, and five or six drops answers every purpose. In the more obstinate cases, however,—cases of patients who have accustomed themselves to take three or four compound cathartic pills, or some harsher quack concoction, every few weeks or days, “to keep their liver acting,”—the bowels sometimes require half a teaspoonful, and in rare instances even teaspoonful doses, three times a day to bring about regular alvine evacuations. Taken in this way before meals this medicine acts as a tonic to the stomach, increasing the appetite and improving the digestion, at the same time that it strengthens the peristaltic movements of the intestines and apparently stimulates the normal functions of the liver. But the cascara is one of the bitterest of medicines, and many persons, especially ladies and children, cannot take it unless it is first well disguised by elixirs, etc. For the benefit of these I have been accustomed to compound it as follows:

R—Ext. Cascara Sagrada,	f ̄vj.
Glycerinæ,	f ̄j.
Curacoa,	f ̄ij.
Syr. Glycyrrhiz. ad.,	f ̄vi.—M.

A teaspoonful of this mixture, which is comparatively palatable, will represent about ten drops of the cascara; and a tablespoonful will represent half a teaspoonful of the same, which is usually all that the worst cases require, taking it three times a day. A solid extract of the same drug is now prepared, so that it can be ordered in proportionate doses in pill form for those who prefer pills to

potions. These cascara preparations seem to me to act even better than the famous dinner pill, and aloetic pills which have been so much in vogue for two generations at least. One thing is certain, they accomplish the purpose of a laxative most admirably, and usually—though not in every case—the dose can be diminished or even omitted altogether after a time, while other laxatives nearly always lose their effect, larger and larger doses becoming necessary.

PNEUMOTHORAX.—Text-books of physiology describe the thorax as an air-tight box containing the heart, lungs, and great vessels; and, after a fashion not particularly clear in any single work, an attempt is made to demonstrate the bearing of this fact on the progress of various chest complaints. The importance attending a thorough comprehension of the physics of the pleural cavity, is probably not fully appreciated by students until they attempt to apply in the wards of the hospital the theories learned in the lecture-rooms of the college. Nor, probably, is this difficulty ever more apparent than when a hesitating clinical clerk is suddenly required to explain the *rationale* of pneumothorax. Rarely is an intelligent and at the same time intelligible reply forthcoming to the question, and we remember more than one case in which *not any* scientific or appropriate description has been elicited.

The question is not abstruse, either; but it demands a certain amount of clear thinking, added to an accurate preliminary comprehension both of the anatomy of the lung and pleura, and of certain elementary mechanical principles. The whole matter, however, was, on Friday evening last, put before the members of the Clinical Society, by their President, Mr. Lister, with such clearness and practicality that we seek no excuse for describing the experiment he referred to. The subject of discussion was pneumothorax, and Mr. Lister said the manner in which he was accustomed to demonstrate to his classes the gravity of the condition was the following: Into the bronchus of a lung obtained from an ordinary butcher, he inserted a glass tube, connecting with this, by means of India-rubber tubing, a hand syringe. Then, with a pair of scissors, he incised the surface of the lung, and on pressing down the piston of the syringe, air passed freely through the wound. On attempting, however, to withdraw the piston, the most considerable force even was found insufficient to do more than just move it, the opening in the lung at once closing and preventing the return of air.

The application of this ingenious and forcible illustration is clear. During life, the lung hangs in a chamber to which air can only enter by abnormal channels. In a condition of pneumotho-

rax such opening is usually produced by a rent (how caused we need not stay to inquire) in the visceral layer of pleura, and we are told on Mr. Lister's authority, that such openings are usually valvular. With every inspiration, then, air will pass from the lung through the opening into the pleural sac, in which, as there is no other mode of exit, it must necessarily be confined. Also, as the wound in the pleura refuses to allow a return current of air through it, the quantity in the chest increases with each breath that is taken, and in this way it is quite easy to understand how the symptoms of pneumothorax may rapidly assume the most urgent character. Treatment by removal of the contained air with a small trocar and cannula produces relief by reducing the pressure set up by the contained gas, but where this is slowly accumulated and long retained it may give rise to most considerable displacement of organs without immediate urgency of symptoms.

Occasionally it happens that cases of pneumothorax undergo spontaneous recovery. Several such were instanced on Friday at the meeting referred to above. But this is a most favourable termination, and is due to the occurrence of some fortuitous events—such as prompt closure of the opening by lymph, and subsequent absorption of the intra-pleural air; or to the fact that the disposition of the lesion permits a *to-and-fro* current of air through it, whereby confinement of the gas is not set up, as proved by a double amphoric sound; or to the efficacy of prompt surgical measures, etc. It is not our intention to dilate on this point now, however; we wish chiefly to reproduce as nearly as possible Mr. Lister's admirable illustration of the meaning of pneumothorax, from a feeling that it may serve to help many others than those whose privilege it is to receive instruction direct from the author.—*Medical News*.

PUERPERAL SEPTICÆMIA, BY DR. J. S. BUCK.—The following case illustrates the value of antiseptically washing out the uterus.—*Medical Times and Gazette*.

Mrs. M., married, aged twenty-eight, a multipara, aborted on Thursday, October 27th, 1881. She was said to be about three months pregnant, and was attended by a village midwife, who stated that "all the membranes came away whole," but that the patient lost a good deal of blood. I was sent for Nov. 1st. On my arrival I found her lying in bed on her back, with her knees drawn up. Her countenance presented that peculiar sallowness usually seen in patients suffering from puerperal septicæmia. She appeared in a semi-conscious state. Temperature 104° F.; pulse 138, very small and thready. She had no lochial discharge whatever (this I was informed had ceased on October 31st, the day previous to my seeing her). I ordered her one ounce of brandy every

three hours, and gave her a mixture containing five grains of carbonate of ammonia, ten minims of spirits of sulphuric ether, and one ounce of decoction of cinchona every four hours. On November 22nd patient seemed rather weaker, if anything. Temperature 104.4° F.; pulse 140, very small and thready. I continued the same treatment, only ordered the brandy every two hours, and repeated the chloral and bromide draught, as she had not slept. On the 3rd, at 4 a.m., she had an attack of convulsions, which lasted about an hour and a half. On my visit she had a slight yellow discharge, which the nurse said smelt very badly. Temperature 104.4° F.; pulse 138, weak and thready. So I determined to wash out the uterus antiseptically. This I accomplished fairly easily, as I found the os uteri would admit the tips of two fingers nearly. I injected a quart of tepid, weak solution of permanganate of potash, which brought away a quantity of very offensive matter and shreds of membranes. I continued the brandy and ammonia treatment. On the 4th I was surprised to see the change in the patient. She had slept well without medicine. The pain in the abdomen which she complained of the day previous had ceased, her temperature had dropped to 101.6; her pulse was 120, much fuller and stronger, and she had no more convulsions. I determined to give her another intra-uterine injection, which I did with some little difficulty, as I found the os somewhat smaller than on the day previous. I injected the same amount and of the same character, and brought away a few shreds of membrane, but it was not offensive at all. I ordered the brandy every four hours, and continued the ammonia and bark mixture. On the 5th she was much brighter and better. Temperature 101°; pulse 120. She slept well; no pain. I ordered the same treatment. On the 9th the patient was progressing well. Temperature 99.4°; pulse 96. She said she felt well and wanted to get up. I ordered her ten minims of dilute nitric acid and an ounce of the decoction of cinchona three times a day. On the 12th she was out of bed for about an hour. Temperature 90°; pulse 88; going on very well. 21st. Since the last note the patient had improved very much, and she is able to sit up all day. She takes her food well and sleeps well; has no discharge, and her temperature and pulse are normal. I have been giving her ten minims of the solution of dialysed iron three times a day, after food, and ordered her to continue taking it.

I think this case shows the good effects of antiseptically washing out the uterus in such cases. Dr. Playfair, in his "Science and Practice of Midwifery," speaks very highly of the practice, especially in those cases of "autogenetic origin, or self-infection as he terms them; and certainly, in my case, the effect was marvelous.

THE REWARDS OF PROFESSIONAL LABOR.—We have recently allotted special space to the notification of wills left by medical men. It must have already struck those of our readers who have glanced at the figures recorded in this weekly report, that the average value of the property handed down by members of the profession to their families is singularly small. This is, unhappily, the fact. The general practitioner is a hard-working, and too often a struggling man to the end of his days. Comparatively few of the class are able to retire, as the members of other callings retire for rest from their labors, before the relief which death brings to all men. Physicians and surgeons as a rule die in harness. The expenses incurred by those who make specialties of medicine or surgery, or of any one branch of either of these departments of professional work, are necessarily great, while the recompense to the life of labor entailed, looking at the career as a whole, is proportionately small. Even the few who seem to make large incomes during a part of their career seldom amass even moderate competencies. Some five-and-twenty years ago, calculations were made for London and the provinces, and it was estimated that a physician, practising as such in London, did not acquire an income on which he would be required to pay income tax for sixteen years from the commencement, while a physician in the provinces reached the legal figure in eleven years, but not earlier. The differences in favor of the provinces are, of course, due to the fact that no man would think of commencing practice as a pure physician in any city or town, except the capital, unless he had special reason to believe there existed "an opening." We have no means of knowing whether matters have mended with the profession generally during the last quarter of a century, but, looking to the increase of its aggregate numbers in relation to the population, we fear there is not much ground to hope that the rewards of professional labor have been sensibly augmented. The laborer is worthy of his hire, and it is well now and again to look into this matter of money. It will sooner or later be necessary to take it into very serious consideration in relation to the question of fees. Meanwhile, the lesson to be learnt from the story of the wills left by medical men is certainly one of caution and thrift. It is a sad reflection that, speaking generally, the families of medical practitioners are insufficiently provided for, a large proportion being left almost in poverty.—*Lancet*, April 8, '82.

ANÆSTHETICS FROM A MEDICO-LEGAL POINT OF VIEW.—Dr. J. G. Johnson, of Brooklyn, gives the following which has an important bearing on the practical relations of patient and medical attendant :

Anæsthetics do stimulate the sexual functions ;

the ano-genital region being the last to give up its sensitiveness. Charges made by females under the influence of an anæsthetic should be received as the testimony of an insane person is. It cannot be rejected, but the *corpus delicti aliunde* rule should be insisted on. Dentists or surgeons who do not protect themselves by having a third person present, do not merit much sympathy.

Deaths from administration of chloroform after a felonious assault, unless the wounding were an unmistakably fatal one, reduces the crime of the prisoner from murder to a felonious assault. The surgeon has no right to use chloroform to detect crime, against the will of the prisoner. But the army surgeon has the right to use chloroform to detect malingerers. The medical expert, notwithstanding he is sent by order of court, has no right to administer an anæsthetic against the wish of the plaintiff in a personal damage suit, to detect fraud. Gross violations of the well-known rules of administering anæsthetics, life being lost thereby, will subject the violator to a trial on the charge of manslaughter. A surgeon allowing an untrained medical student to administer anæsthetics, life being thereby lost, will subject the surgeon himself to a suit for damages. What he does through his agent he does himself. The physician who administers an anæsthetic should attend to that part of the business and nothing else. He should have examined the heart and lungs beforehand. He should have the patient in the reclining position, with his clothes loose, so as not to interfere with respiration ; should have his rat-tooth forceps, nitrite of amyl and ammonia, and know their uses, and when to use them and how to perform artificial respiration.

In operations on the ano-genital region and the evulsion of the toe-nail, complete loss of sensation in these parts should never be allowed, and no operation on these parts at all should be had under an anæsthetic, unless by the approval of a full consultation who have a knowledge of the dangers. Chloroform cannot be administered by a person who is not an expert, to a person who is asleep without awaking him. Experts themselves, with the utmost care, fail more often than they succeed in chloroforming adults in their sleep.—*Annals of Anatomy and Surgery*, December, 1881.

PUERPERAL EPILEPTIC CONVULSIONS.—Dr. Lucas, of Liverpool, reports the following case in the *London Lancet*, April 8, '82 :—On Dec. 27th, 1881, at 5 a.m., I was called by a midwife to see Mrs. W., who had been some hours in labor (primipara), and had just taken "a fit." When I saw her the convulsions had passed off ; quite sensible ; face somewhat puffed ; os dilatable and head presenting. While passing a catheter she had a violent attack of convulsions ; urine albuminous. I then gave chloroform, and delivered with long for-

ceps; child alive. She had two more fits before delivery. I ordered draughts of chloral hydrate and bromide of potassium, notwithstanding which the fits continued during the day at intervals of one hour and a half. I had arranged so that chloroform was applied whenever a fit came on. Towards evening she lost consciousness. That night she had three fits within the hour, so (at the suggestion of Dr. Charles Hill) I used a subcutaneous injection of a quarter of a grain of morphia (B. P. solution). No fits for seven hours and a half. I then gave a clyster and passed catheter. No fits during the day. I gave another morphia injection (quarter of a grain) that night. No return of convulsions. Recovered her senses gradually, suckled the child, and made a quick recovery.

I am induced to record this case, not having seen reported in the *Lancet* any cases supporting those mentioned by Dr. S. Maberly-Smith in the *Lancet*, July 16th, 1881, page 86. There is no doubt that the hypodermic injection saved this woman's life, and I should certainly try the same treatment in the next case of uncomplicated puerperal epileptic convulsions as soon as possible.

BLISTER TREATMENT OF ACUTE RHEUMATISM.

—Dr. Herbert Davies, in pointing out the unsatisfactory results of the salicylate treatment (*Lancet*, Feb. 11th), claims the following advantages for the blister treatment, deduced from the observation of 50 cases at the London Hospital:—

1.—Blisters well and early applied (while fever is high and pain most acute) around every inflamed joint, and followed by large poultices to favor the discharge of large quantities of serum, produce rapid and full alleviation of the pain, reduce the pyrexia quickly, and speedily restore the use of the painful joints.

2.—The bold and free application of blisters around each inflamed joint restrains the tendency of the rheumatic virus to desert the limbs for the heart, thus depriving this disease of its most dreaded result. In the London Hosp. Clin. Report, I find the following statement: "In no case where the heart was sound at admission did any organic lesion subsequently develop itself, and in two cases in which soft but distinct mitral murmur was audible when the patient came under treatment, every trace of the sound rapidly disappeared as soon as a free and abundant serous discharge had been established."

3.—Relapses are slight in intensity and by no means frequent.

4.—The urine loses under this treatment its abnormal acidity without the internal use of any alkaline remedy, becoming often neutral and even alkaline.

5.—The time of the stay of the patients in the hospital was much less than six weeks—the old traditionary remedy for acute rheumatism. The

average of my cases was 26 days.—*Maryland Med. Jour.*

PROSPECTS FOR CURE OF HEART DISEASE.—According to Dr. J. Milner Fothergill, the views of the medical profession as to the prospects for the future of cases of valvular disease of the heart are undergoing very considerable changes, in a direction opposite the hopelessness with which they have been regarded in the past. Not every murmur which may be heard over the heart is a sign that the patient is destined to a sudden death from the action of the cause that produces the sound nor is it always evidence of organic cardiac disease. It is a grave symptom, but its importance may be, and often is, exaggerated. It is only probably produced by deformity in the cardiac valves; but anæmic, aortic, and still more, pulmonary murmurs, are now generally recognized. Dr. Fothergill has cases in his own practice, of mitral murmurs which have existed for sixteen, fourteen, twenty-seven, and thirty-eight years, without developing any very alarming symptoms, and reports the death, between the writing and publication of this article, of a case of aortic regurgitation—a rapidly fatal form of disease—which had not perceptibly advanced during twenty-five years of excessive activity. He also notices cases of aortic obstruction of fourteen, sixteen, and eleven years, of which the first only has as yet died. In conclusion, he observes that under proper treatment, by which the prospects are profoundly affected, and with care, a life of activity is practicable in many cases, provided bodily exertion be avoided, or exercised moderately.—*Popular Science Monthly*.

QUININE IN CHRONIC CYSTITIS.—In chronic cystitis accompanied by a little fever, ammoniacal urine, and charged with mucus, with frequent desire to micturate, M. Thornton, after emptying the bladder, recommends the injection of at first four ounces of tepid water, which is allowed to run out immediately afterward; then an injection of the third part of the following solution: Quinine, grs. xvi; sulphuric acid, q. s., distilled water, 3 x. The liquid thus injected is maintained some seconds in the bladder, after which two-thirds are allowed to flow out, while the remainder is left for an hour in the urinary reservoir. This injection produces a very slight smarting, and after a treatment of some days the urine becomes acid and no longer contains mucus.—*Medical Press and Circular*.

A MALPRACTICE suit in Belgium brought against a physician for the alleged improper prescription of morphia, resulted in an acquittal not only, but the plaintiff was adjudged to pay the defendant one thousand francs damages. It is reported that the action was instigated by a rival doctor.—*Kings Co. Proceedings*.

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ETHER VS. CHLOROFORM.

Considerable discussion has taken place recently in the medical journals relative to the comparative safety of ether and chloroform. So warm has been the discussion in England that a surgeon of eminence has written to the *London Times* in such terms as to lead the public to infer that the surgeon who uses chloroform is wilfully imperilling the patient's life. For many years past medical journals in the United States have characterized deaths from this agent as "unjustifiable homicides, warranting judicial interference." More recently the journals in Great Britain have taken a strong stand against its use in ordinary cases, and advise the substitution of the less dangerous agent, ether. In a late number of the *Boston Med. Journal*, it is asked—Why, if the practice of administering chloroform as an anæsthetic is not opposed and prevented by the medical profession, should not the courts without fear or favor interfere and stop such unjustifiable homicides?

The use of chloroform from its very first introduction, frequently proved fatal. Long before it had come into general use, within ten weeks, indeed, of its discovery as an anæsthetic, it caused the death in England of a girl fifteen years of age. This girl, Hannah Greener, had no other disease than an in-growing toe-nail, and presented no morbid evidences further than those which chloroform itself would produce. Within a month after her death a woman in Cincinnati, aged thirty-five years, died from the effects of its administration; within another month a death occurred from its

use in Boston; and about two months afterwards another in Boulogne. From that time until now, a period of about thirty-four years, scarcely a month has passed which did not chronicle a death from the administration of chloroform. Some years ago it was estimated that the proportion of deaths from its use was one in every 2,500 administrations; a very high mortality. The record of deaths was then, in all probability, not perfect, and a careful calculation now would most likely show its use to have been fatal in a yet greater proportion.

It is argued by the advocates of the use of chloroform, that those who die under it, or most of them, were living with their lives hanging on a thread so flimsy that the slightest shock—the loss of a little blood, a little unusual haste, the excitement of passion, would have a fatal effect. It is true there are thousands going about in apparent health, who from some concealed morbid condition are liable to die at any moment from a very slight physical or mental shock. Doubtless many who die under chloroform are of this type; but in many of them the *post-mortem* has revealed no abnormal condition whatever. The same advocates argue that often the quality of the chloroform used is bad; that the mode by which it was administered is at fault; or that the patient was not properly prepared for it. It is also said that sometimes the operation is the cause of death. There is probably a good deal in all this; but we believe nevertheless that the total good attributable to this agent is much more than outweighed by the evils resulting from its use, and we therefore urge the advisability of using that which is held to be a much less dangerous anæsthetic.

It is undoubtedly difficult, if not impossible to settle satisfactorily by actual statistics the question of the relative danger of the use of chloroform and ether; because, although we know about how many deaths occur from the effects of each agent, there are no means of ascertaining the relative proportion of cases in which each had been used. But the recorded opinion of many who, having for a great number of years had experience with chloroform, have also for many years abandoned it in favor of ether, is, that ether properly administered, is a much safer anæsthetic than chloroform. It is also claimed that ether, besides being safer, will produce anæsthesia much sooner than chloroform, by which time is saved, and a patient under the

influence of ether is much more passive, and therefore in a far better condition for an operation than one under chloroform. Besides, ether when administered without food in the stomach, rarely gives rise to troublesome sickness. Both in private and hospital practice in this city for several years past, ether has very largely taken the place of chloroform, and the results have been most satisfactory.

ONTARIO BOARD OF HEALTH.

Several weeks have elapsed since the appointment of the chairman and members of the Ontario Board of Health, but up to the present time no appointment of a secretary has been made. This is to be regretted, as there is much work awaiting the action of the board. It is especially desirable that efforts be made as soon as possible to organize local boards of health in every municipality in the Province, in order that some sanitary work may be done in all the villages before the heated season. Wherefore the delay in the appointment?

We have no desire to dictate in any degree to the Government, even in a matter concerning the public health, but feel it incumbent upon us to say a few words in regard to the appointment. The gentleman who is not only most fairly entitled to the position, but who is also, probably, upon the whole, the most fully qualified to discharge the duties of the office, is, we understand, prepared to accept it, and at once to commence practical work. We need hardly say we allude to Dr. Playter. But for his untiring efforts it is not at all probable there would yet have been any provision for such a board. It was almost entirely through his efforts during the past two or three sessions of the Legislature, that the medical men in the House took such action as led the Government to bring in a measure providing for the establishment of a board. Through his efforts several meetings of members of the profession were held in this city for the purpose of urging the desirability of such a measure upon the Government. He also, for the most part, framed the various resolutions which have been passed from time to time by the Medical Associations of the Province and the Dominion, urging this subject upon the attention of the Dominion and Local Governments. All this would not, of course, entitle him to the position were he not considered competent to discharge

the duties. But from letters of recommendation we have before us, from leading medical men in the profession and others, we feel certain that the majority of the profession not only consider him quite competent, but regard him as the most competent, on account of the experience he has had in sanitary work. He has given greater consideration and study to the special work which is to engage the attention of the board, than any other man in Canada. He has also had a good deal to do with the vital statistics of the Province, in the Registrar-General's Department for a number of years in connection with the preparation of the annual report, and the general decennial review appended to the last annual report is entirely his work. This is an interesting and valuable report considering the imperfect nature of the materials available. Dr. Playter has written a good deal on public health, and his work has generally been well received, and through his labors he has become known in the United States as well as throughout Canada, as a prominent sanitarian. He has also made some useful investigations into the causes of consumption, one of the most important diseases with which the board will have to deal.

VOLUNTARY POWER OF DISLOCATION.

A short time ago we had an opportunity of witnessing a most remarkable and interesting case of voluntary dislocation. The subject of this wonderful peculiarity is an American acrobat and contortionist named Chas. H. Warren. He visited the various medical colleges in the United States and Canada during the past winter, and exhibited his wonderful powers before the classes. He is at present in London, England, and the *London Lancet*, April 8th, '82, gives the following description of his wonderful powers. A history and careful study of this remarkable case will also be found in Dr. Frank Hamilton's work on "Fractures and Dislocations," 1880, page 807.

"By voluntary muscular contraction he dislocates forwards either or both condyles of the lower jaw, downwards (partially) the head of each humerus, forwards or backwards (partially) each carpus, upwards and backwards (completely) the head of each femur, and backwards and forwards (partially) each of the phalanges of the fingers and thumb. With the aid of his hand he partially dislocates to

either side the carpus, and forwards and outwards the ankle-joint; when the knee is flexed he can rotate the tibia very freely, and make the inner condyle project an inch in front of the femur. Each of these displacements is accompanied by a distinct snap, but the replacement of the bones is noiseless and without effort. The most remarkable, as also the only complete, of these dislocations is that of the hip. He stands at ease with the toes turned further out than is usual, and has unusual freedom of eversion of the lower limbs. When the femur is displaced, the great trochanter is raised and drawn back on the pelvis, and is still very prominent; the limb is shortened and inverted, and knee- and hip-joints are flexed; the head of the bone cannot be felt. The explanation of these facts is that the man's ligaments are unusually lax, while his muscular power is very great, and probably also the rim of the acetabulum is less prominent than usual. In addition, Mr. Warren shows other illustrations of his remarkable power over his muscles, which are of fully as much interest as the foregoing. Thus he can contract at will the two pillars of the fauces, the platysma myoides, and the pectoralis minor, and can fix the elbow-joints by strong contraction of either the arm or forearm muscles, or of both simultaneously. He voluntarily produces the deformity of talipes equinus and talipes equino-varus. Equally interesting is his control over the muscles of the trunk. Thus he can contract his recti abdominis in a wave-like manner, and illustrate capitably the formation of phantom tumors. He can contract his abdominal muscles quite back on the spine, so that the abdominal aorta is seen, as well as easily felt, pulsating. He also expands his chest to an enormous size, and can contract it so completely that the front becomes quite concave. These are merely examples of muscles unusually developed, and brought under the influence of the will to a most remarkable extent; they do not betoken any congenital peculiarity."

DR. HORATIO YATES.

Dr. Yates, of Kingston, Ontario, a notice of whose death appeared in our last issue, has been a resident of that city for upwards of thirty years. He graduated in medicine in the University of Pennsylvania, and received his licence from the

Provincial Medical Board in 1842. In 1863 he received the degree of M. D. in Queen's University. He aided in the reorganization of the General Hospital and assisted in the re-establishment of the Medical Faculty of Queen's College. In 1854, he was appointed Professor of Surgery in the Royal College of Physicians and Surgeons, and for several years held the position of surgeon of "A" Battery. He was also a member of the Ontario Medical Council from 1866 to 1869. And thus, one by one, the ancient landmarks pass away, and their places are filled by others. Dr. Yates was in the 61st year of his age at the time of his death. His place will be missed amongst a large circle of friends and relations.

TRINITY MEDICAL SCHOOL, TORONTO.—The following are the names of the successful candidates at the recent examinations in the above school:—

Fellowship Degree.—W. H. Macdonald (Gold Medallist), A. C. Gaviiler (1st Silver Medallist), A. D. Smith (2nd Silver Medallist), W. Bonnar, A. Cameron, H. H. Graham, W. Hanbidge, J. M. Johnston, J. Johnston, H. P. McCausland, J. T. Sutherland (Certificates of Honor), R. W. Belt, W. N. Brett, T. W. Duncombe, J. A. Gracy, S. A. Metherell, J. A. Urquhart, J. E. Shore, P. J. Strathy, and J. D. Wilson.

Primary Examination.—J. E. Jenner, E. H. Williams (Scholarship equally divided between them), T. H. Robinson, B. H. Scott (Certificates of Honor), A. L. Brown, W. F. Dickson, P. N. Davy, S. N. Darling, J. L. Davidson, C. E. B. Duncombe, A. G. Elliot, E. Furrer, W. F. Freeman, E. N. Hoople, A. D. Lake, S. W. McConachie, F. H. Sawers, T. C. Cowan, G. J. Charlesworth, A. Hawke, R. Hislop, S. W. Lamoreaux, J. A. McMichael, W. A. Martin, W. Roche, J. Shoults passed on several of the subjects. The Baptie Prize was awarded to E. H. Williams, and a special prize in Materia Medica to B. H. Scott.

First Year's Examination.—H. Leitch, W. M. Brown, J. Saunders, O. Belfry, F. Snellgrove, D. A. R. Jones, J. A. Couch, A. B. Wilson, J. J. Paul, R. Ovens, D. Ovens, H. H. Hawley, E. A. Hall, P. N. Dewar, W. Fierheller, W. J. Chambers, S. A. McKeague, W. Delaporte, T. McCullough, J. R. Logan, F. J. Lundy, J. A. Watson, —. Con-

worth, R. J. Lockhart, S. S. Farrar, A. R. Hanks, J. Rack, W. J. Gunn, W. J. Mitchell, W. S. Harrison, C. Trow, W. E. Spragge, T. H. Mott, A. McKillop, F. C. Hood, W. A. Pepler, J. S. McCullough, A. P. Wade, A. T. Little, J. C. Bell, G. L. Johnston, A. E. Stuart, J. E. Anderson, J. E. Brown, W. A. Wilson, — Lawton, J. Lindsey, F. H. Johnstone, J. N. Cochran, — Salter, J. G. White, J. Ferguson, C. J. McIntyre, A. K. Sturgeon, D. N. Carmichael.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The professional examinations of the above-named college have just been brought to a close. Eighty-one candidates presented themselves for the licence; of these, 59 were successful, and 22 failed to come up to the required standard. There were 58 candidates up for primary. Of these, 46 passed and 12 were rejected. The following are the names of the successful candidates:

Licentiates.—F. Bentley, L. Bentley, T. G. Brereton, J. Baugh, J. C. Burt, Wm. Bonnar, G. S. Beck, J. F. Bell, E. E. Book, Wm. Brett, E. Bedard, G. W. Clendenan, A. Cameron, G. S. Cleland, A. P. Cornell, R. M. Coulter, W. J. Charlton, L. E. Day, G. C. Dowsley, J. T. Duncan, C. R. Dickson, J. G. Davidson, W. F. Eastwood, Ira A. Freel, R. M. Fisher, A. C. Gaviller, R. W. Garrett, Wm. Gilpin, Wm. Hanbidge, A. J. Henwood, D. A. Johnston, J. M. Johnston, W. H. Johnson, C. E. Jarvis, James Lafferty, J. G. Mennie, T. M. Milroy, M. McPhaden, H. P. McCausland, H. R. McGill, T. F. McMahon, J. T. O'Keefe, L. C. Prevost, S. R. Rogers, D. B. Rutherford, David Rose, B. L. Riordan, H. H. Reeve, T. J. Symington, J. E. Shore, A. D. Smith, Alex. Stark, J. M. Stewart, W. F. Shaw, T. H. Stark, E. D. Vandervoort, R. R. Wallace, A. B. Welford, C. A. Weagant.

Primary.—J. L. Addison, W. G. Anglin, J. Bray, J. W. Clerke, J. Cugan, W. Cuthbertson, W. H. Carleton, D. Campbell, A. P. Cornell, H. R. Casgrain, W. F. Dickson, J. G. Davidson, F. P. Drake, W. F. Freeman, R. N. Fraser, G. A. Graham, J. B. Gullen, J. E. Hausler, R. Hearn, A. J. Henwood, Wm. Jacques, J. M. Johnston, J. F. Kidd, F. D. Kent, L. G. Langstaff, T. D. Meikle, J. Menzies, A. F. McKenzie, S. W. McConachie, A. McMurchy, E. B. O'Reilly, L. C. Prevost, F. H. Robinson, J. W. Ray, W. A. Ross, J. Spence,

A. Sangster, W. F. Shaw, Miss Augusta Stowe, F. H. Sawers, A. D. Thompson, A. D. Watson, J. B. Whitely, E. R. Woods, J. D. Wilson, P. C. Walmsley.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, KINGSTON.—We give below the official announcement of the successful candidates at the recent examinations in the above College. The announcement in our last issue was incomplete.

Final Examination.—R. W. Garrett, D. B. Rutherford, J. M. Stewart, A. P. Cornell, C. E. Jarvis, H. Knox, R. S. Anglin, A. D. Cameron, G. H. Denike, H. N. McDonald, A. A. Mordy and J. T. Reeve.

Third Year.—J. F. Kidd, W. Young, W. G. Anglin, T. A. Moore, A. McMurchy, H. M. Froland, John Cryan, C. Clancy, Dr. Hickey, L. T. Davis, G. S. McGhie, A. J. Grange, J. Smith and W. Hall.

Second Year.—H. R. Duff, R. N. Fraser, T. Cumberland, A. Forin, W. H. Bullis, E. Foxton, W. J. Webster, R. C. Cartwright, D. H. Mackie, H. J. Williams, H. J. Emery and E. S. Roy.

AMENDMENTS TO THE QUEBEC MEDICAL ACT.—The Special Committee to take into consideration the proposed amendments to the Medical Act for the Province of Quebec, reported in favor of the Bill, Hon. Mr. Lynch in the chair. There were present—Dr. Howard, President of the College of Physicians; Drs. Lemieux and Trudel, Vice-Presidents; Dr. Belleau, Secretary; Dr. Larue, Registrar; Dr. Lachapelle, Treasurer; also Drs. Hingston, Gingras, Larocque, and Larue, of the Medical Board. The present medical tariff for the Province of Quebec was repealed; but the Medical Board have the right reserved them to make a new one. The amendments to the Medical Act proposed by Mr. Mercier were adopted. The Public Health Bill was also discussed, and reported with slight amendments. We are pleased to learn that our friends in Quebec have succeeded in securing a Public Health Bill somewhat similar to the one now in force in Ontario.

NEPHROTOMY.—The operation of nephrotomy (*Canada Medical Record*) was recently successfully performed by Dr. Roddick, in the Montreal General Hospital. The patient was a girl of twenty years of age, who had been suffering from frequent

and painful micturition, the urine being scanty, muco-purulent and bloody. The urine became gradually more purulent and the patient's health steadily declined. In July last chills and fever set in accompanied by vomiting and diarrhoea, with tenderness over the right kidney. In October a well defined tumor could be felt in the right hypochondrium. The presence of pus in the tumor having been ascertained by the aspirator a transverse incision was made in the loin midway between the last rib and the crest of the ilium, and twenty ounces of putrid pus evacuated and the cavity washed out. The sac was secured to the edges of the wound by silk sutures and a drainage tube inserted. The operation has so far proved a complete success.

ATTEMPTED ASSASSINATION OF DR. GRAY, OF UTICA, N. Y.—The friends of Dr. Gray, medical superintendent of the N. Y. State Lunatic Asylum and editor of the *American Journal of Insanity*, will regret to hear that he has been shot at and severely wounded by an intending assassin. The man, whose name is Renshaw, an old soldier, shot at him through the window of his study, the ball entering at the external angle of the right eye and escaping through the middle of the left cheek. The intending assassin is not known as a lunatic, but had some real or supposed grievance. Dr. Gray had no bad symptoms, and has almost entirely recovered.

PREVENTION AND TREATMENT OF POST PARTUM HEMORRHAGE.—Dr. T. More Madden (*International Med. Congress*), advises a course of iron during the last months of pregnancy as a prophylactic measure. Speaking of the various modern methods of arresting flooding, he says, that the injection of hot water is a very uncertain method, except where there is great depression and other remedies have failed. Ice water has the same failings. The injection of a strong solution of perchloride of iron is too apt to give rise to metro-peritonitis. He, however, speaks highly of applying the iron solution on a sponge which is held in the hand, and both inserted into the uterus, and held there until the contractions force them out together.

BANNING TRUSS AND BRACE CO.—The instruments and appliances manufactured by the above

firm have been found, after years of faithful trial and experiment to be surpassed by none in the market. They make a specialty of spinal braces, and no other house can compete with them in this line of manufacture. The instruments are light, easily adjusted, comfortable to the wearer and what is of most consequence, thoroughly efficacious. Their trusses are also superior in make, light and durable in character. Physicians requiring anything in their line will do well to correspond with the firm, under the assurance that every attention will be paid to their requirements.

THE PATHOLOGY OF MALARIA.—Dr. M. A. Laveran (*London Lancet*) has found in the blood of malarial patients very definite and remarkable parasites. They are of different shapes, some being curved, cylindrical bodies, with pointed extremities, with pigment granules in the centre, making a dark spot. Others are spherical and about the size of blood corpuscles, also containing pigment. Fine filaments could be traced on these bodies about three times the length of a red corpuscle. The first, or cylindrical corpuscle had no motion; the spherical, however, owing to the filaments, had an oscillating movement.

IS SALICYLIC ACID A SPECIFIC FOR RHEUMATISM?—Dr. Lewis Shafter, Physician to the Devon and Exeter Hospitals (*Brit. Med. Jour.*), commenting upon the value of salicylic acid in the cure of rheumatism, is unwilling to admit its specific properties. But Dr. Wm. Strange, of the Worcester General Infirmary, writing in the same issue of the journal, after an extended experience with this drug, is confident in his statements that in the same sense as quinine acts as a specific in malaria, or mercury and iodide of potassium in syphilis, so salicylic acid, but more especially its compound, the salicylate of soda, acts as a specific in acute articular rheumatism, by neutralizing the poisonous elements of the blood.

TREATMENT OF CHRONIC ECZEMA.—The *Chic. Med. Review* gives the following:—Avoid the use of soap, as this is irritating. Twice a day, bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of

borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield by the ordinary rubber cot.

BISHOP'S MEDICAL COLLEGE, MONTREAL.—The following are the names of the successful candidates in this University: Degree of M.D.C.M.—H. Bishop (Wood Gold Medallist); N. C. Smilie (Chancellor's prize); J. W. Cameron (First-class honors); W. D. M. Bell, and G. M. Balcom (Second-class honors) W. Prendergast.

Primary,—J. B. Saunders (David Scholarship); J. A. Caswell (First-class honors); G. A. Balcom and E. Sirois (Second-class honors); W. D. M. Bell, W. Prendergast.

PERITONEAL TRANSFUSION.—The *Medical News*, Philadelphia, states that three cases are reported of injections of defibrinated blood into the peritoneal cavity, one death and two recoveries. From two to six ounces of blood were used at each injection. Mosler, of Greifswald, had the fatal case, and claims death to have taken place from repetition of the transfusion. In the lower animals there seems to be no danger whatever. The method is to defibrinate fresh blood, heat it to normal temperature, introduce a trocar and inject. The instrument should be warmed.

PAPOMA.—This new and valuable preparation of food for infants has now been before the profession for some time, and wherever it has been tried it has given entire satisfaction. The name of the manufacturer is a sufficient guarantee as to the purity and excellence of the quality of the article. Our own experience of its use bears out the almost universal testimony in its favor. It is easily digested, readily assimilated, and does not produce gastric disturbance or flatulence. It is a valuable addition to the diet of the nursery.

ANTIDOTE FOR STRYCHNINE.—The *British Medical Journal* of March 11, 1882, stated that Messrs. Greville, Williams & Waters of the Royal Society have discovered an antidote for strychnine. The substance is named *lutidine*, and is obtained by distilling cinchonine with caustic potash. The efficacy of the remedy has been tested by experi-

ments on frogs. The results of the experiments are most promising and lend encouragement to the hope that, at last, a reliable antidote has been discovered.

DANGERS OF ANÆSTHESIA.—Speaking in reference to the danger of using pure chloroform for anæsthetic purposes, Dr. Henry Smith says (*London Lancet*), "During the last five years, both in private and hospital practice, the anæsthetic employed in my operations consists either of ether alone, or of the mixture composed of one part alcohol, two of chloroform, and three of ether. This mixture is comparatively harmless, and will produce the same amount of insensibility as is effected by more dangerous anæsthetics."

TEST FOR GLUCOSE IN THE URINE.—Dr. L. S. Oppenheimer gives (*Louisville Medical News*) a modification of Prof. Haines test for glucose in the urine. One or two drops of glycerine are dropped into a test tube. A few drops of an aqueous copper sulphate solution are added, then about five or six times this quantity of liquor potassa is poured in and the whole boiled. The urine is then dropped in, and if sugar be present the yellow or reddish color will suddenly appear.

WARNER'S SUGAR-COATED PILLS.—Messrs. W. Warner & Co. are known the world over for their thoroughly reliable and valuable sugar-coated pills. We have been using their different preparations with the utmost satisfaction, and have much pleasure in recommending them to the profession. Our acquaintance with this firm, and our personal knowledge of the care bestowed in the manufacture of their preparations fully warrant us in the above statements. Their sugar-coated pills have always received the highest awards at all the great international exhibitions at home and abroad.

APPOINTMENTS.—Dr. K. N. Fenwick, Prof. of Physiology in the Royal College of Physicians and Surgeons, Kingston, has been appointed physician to Kingston General Hospital, vacated by the death of Dr. Yates.

As we go to press we learn that P. H. Bryce, M.A., M.D., of Guelph, has been appointed Secretary of the Ontario Board of Health.

TORONTO MEDICAL SOCIETY.

Feb. 9th, 1882, the Society met at 8.15 p.m., the President in the chair; the minutes of last meeting were read and adopted.

Dr. Workman then gave notice that three months hence he would move that the annual fee for membership of the Society be reduced from \$3 to \$2.

Dr. Graham exhibited two vesical calculi removed at a p. m. examination from a lad aged seventeen; the larger one was firmly fixed, and encysted below the pubic arch, and was taken for an exostosis. The same gentleman also showed a left lung and aorta; the aorta was aneurismal and had ruptured into the pleural cavity; the patient from whom the specimen was taken also suffered from pleurisy with effusion. The patient's voice was hoarse, due to pressure on the recurrent laryngeal by the aneurism.

Dr. Burns showed a young man aged nineteen, with hypertrophic enlargement of the ulnæ and tibiæ. No clue could be got to the disease from the family history. No evidence of syphilis except slight protrusion of the frontal eminences, and the bridge of the nose being sunken.

Dr. Wilson showed a fetus with an abscess in the left thigh, with arrest of development in the affected limb.

Dr. Nevitt then showed a ruptured uterus; the child's body and part of the placenta had escaped through the rent into the abdominal cavity. No decided cause could be given for the accident. A microscopic examination showed fatty degeneration and inflammatory infiltration. The rent extended through part of the placental attachment.

Dr. Oldright showed a large tumor, which at first was thought to be fatty, but on microscopic examination it was found to be a lympho-sarcoma in structure; it was removed from the upper part of the thigh, situated beneath the adductor longus. Weight, 4½ lbs.

Dr. Cameron then showed a case of palmar squamo-pustular syphilide. No history of syphilis was obtainable, but the patient improved greatly under a mixture containing the perchloride of mercury and the iodide of potassium. The case also showed serpiginous eczema on the extensor surfaces of the arms.

Dr. McPhedran related a case in which there

was loss of power of the lower extremities after confinement. He could assign no cause for the malady.

Dr. Temple mentioned a similar case, which, after some months quite regained the use of her limbs, no special treatment being adopted.

The President then vacated the chair, and read a short paper upon "The difference between acute delirium and insane delirium." After a few preliminary remarks, he described the different effect alcohol had upon different persons and gave a vivid description of individual cases. He also gave a description of the mania of hysteria and delirium tremens, and concluded his paper by giving the points in the differential diagnosis between acute and insane delirium. The Society then adjourned.

February 23rd, 1882.—The Society met at 8.30. Dr. Graham in the chair. The minutes of the last meeting were read and adopted.

Dr. Davidson then exhibited a placenta which had been adherent to the uterine wall throughout nearly its whole extent. Masses of fibrinous lymph were to be seen on its surface, and in order to remove the placenta it was necessary to introduce the whole hand into the uterine cavity. A discussion then ensued as to the merits and demerits of introducing the hand into the uterus to remove adherent placenta.

Dr. Riddel showed the head of an aged man, whose widow was committed for trial on a charge of murdering him, on the medical evidence given at the inquest, which stated that the right temporal bone had been fractured, the result of several blows from some blunt instrument. On a close examination of the skull by Dr. Riddel, it was found that there was no fracture of the right temporal bone, but that a small fragment of the parietal bone was wanting, which must have been fractured at the time that the calvarium was removed by the operator, which, had it been fractured before the p. m., would have crumbled away or been detached from the dura mater by the action of the saw. Dr. Riddel also found a fracture of the left parietal, frontal and occipital bones, which must have been produced by the unskilful removal of the skull cap. At the trial of the supposed murderess Dr. Riddel was called for the defence, and gave his evidence in accordance with what he found, as above stated, upon which, and together with similar evidence by Dr. W. T. Aikins, the woman was acquitted.

Dr. Oldright then made some observations as to the condition of the prepuce in early

boyhood. He thought it was a very common thing to find the prepuce contracted in children, and that needless operations were often performed. He thought that as age advanced, the condition generally righted itself. A discussion ensued upon the subject, and several cases were cited where reflex symptoms were cured by the removal of the prepuce.

A communication from Dr. Hillary, of Annotto Bay, Jamaica, was then read, regarding an autopsy in which air was found in the right auricle of the heart and in the gall bladder, and there was also general emphysema. The patient had died suddenly. The Society then adjourned.

Books and Pamphlets.

1st. A HANDBOOK OF UTERINE THERAPEUTICS, AND OF DISEASES OF WOMEN. By Edward John Tilt, M.D. Fourth edition.

2nd. A TREATISE ON DISEASES OF THE EYE. By Henry D. Noyes, M.D., A.M.

3rd. LECTURES ON DISEASES OF CHILDREN. By Edward Henoch, of Berlin.

It is now a long time since the Preacher said, "Of making many books there is no end." He very truly added, "Much study is a weariness of the flesh." In his days the printing press had not even become a subject of prophecy. What would he think, were he now to revisit our planet, of the overwhelming profusion of ever-multiplying issues of new books, of all sorts and sizes, which threaten, not merely to weary the flesh, but actually to wear every vestige of it off the bones of those who strive to keep within the domain of modern bibliolatriy? These reflections are forced upon us by the sight of only half-a-dozen of the numerous volumes submitted to our criticism by the enterprising publishers of New York and Philadelphia, among whom it might go without saying that the house of Wm. Wood & Co. still persist in occupying the first rank, and accordingly we have to acknowledge our obligations for the above valuable publications.

THE POPULAR SCIENCE MONTHLY for May, 1882. New York: D. Appleton & Company. Fifty cents per number, \$5 per year.

The contents of the May number are varied and substantial, without being striking or exceptional. "The Methods and Profit of Tree Planting," by N. H. Egleston, is an interesting article devoted to the remedy, practical benefits and rules of successful tree-culture. Herbert Spencer, in a short arti-

cle, gives his estimate, which is not very high, of "Goldwin Smith as a critic." Dr. Rutherford speculates on the causes, and offers a new theory on the "Diffusion of Odors." R. W. Lovett discourses on "The Development of the Senses," and Dr. Bachelor gives some information on "The Tree that bears Quinine." There is a full and very entertaining "Sketch of Sir John Lubbock," besides many other interesting articles, and an unusual budget of miscellaneous matter at the close of the number.

THE OPIUM HABIT AND ALCOHOLISM, by Fred. H. Hubbard; published by A. S. Barnes & Co., New York.

This "*unus e pluribus*" contribution to the therapeutics of inebriety will be much prized by all those who desire to enrich their libraries with books which tend to enhance the reputation of the possessor. By far the greater part of it is given to the exposition, by illustrative cases, of the treatment pursued by the author, which, no doubt, was attended with that uniform success which proves an irresistible stimulus to all earnest philanthropists. The field of practical utility is ample enough to warrant the hope that this work will be largely sought after.

SUPPRESSION OF URINE—CLINICAL DESCRIPTIONS AND ANALYSIS OF SYMPTOMS, by E. P. Fowler, M.D., with 39 clinical cases, etc.

This little volume commends itself by its brevity, and perhaps the colored plate in the front will contribute not a little to its attractiveness, though the multitude of tabular expositions which must have cost the compiler a great amount of labor, will hardly be dwelt upon by the reader with that interest and patience which the zeal and industry of the author should command.

Births, Marriages and Deaths.

On the 13th ult., Dr. Munro, St. Denis Street, Montreal, aged 75 years.

On the 19th ult., Frederick H. Wright, M.D., etc., son of Dr. H. H. Wright, Toronto, aged 30 years.

On the 15th ult., Dr. H. Bingham, of Manilla, Ont., aged 56 years.

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Original Communications.

FORWARD DISPLACEMENTS OF THE UTERUS.*

BY J. W. ROSEBRUGH, M.D., HAMILTON, ONT.

That forward displacements of the uterus are frequently met with in practice, and at the same time found difficult to treat satisfactorily is proven, I believe, by the numerous and ingenious attempts made from time to time to devise a suitable and efficient anteflexion pessary. That no instrument yet brought forward has met with general approval and acceptance may be partly accounted for by the fact that it is exceedingly difficult to devise a pessary capable of elevating and maintaining the pelvic organs in their normal positions, without at the same time causing an undue pressure on some parts sufficient to become irritating and uncomfortable. Another reason may be found in the fact that other troubles, such as prolapse of the vagina, and prolapse of the bladder, frequently combine to complicate the displacement of the uterus, and a pessary that does not meet all the requirements of the case must prove inefficient.

If more care were taken in investigating all the symptoms complained of in these forward displacements, as well as in the indications for treatment, more satisfactory results could be obtained by the use of a suitable ante-version pessary. In investigating ante-version symptoms let it be remembered that the vagina is not, as generally described, a circular canal. It has an anterior and posterior surface, triangular in shape, lying in close apposition to each other. It has no side walls, but the anterior and posterior surfaces, which are traversed by numerous rugosities, lie in perfect contact, closing the passage when not separated by some foreign body. The uterus is not a continuation of the

vagina in the curve of the pelvis, but sits fixed in the anterior wall near its upper end, the vaginal portion protruding through almost at right angles for half or three quarters of an inch, frequently impinging upon the posterior wall.

The posterior vaginal wall is supported, and made to curve forward in the anterior half of its length by the wedge shaped perineal body while the posterior portion having no such support is depressed towards the rectum into an oblong spoon-shaped pouch. The anterior vaginal wall, triangular in shape, having no firm attachments, settles down and presses accurately against the lower portion of the posterior wall, while the vaginal portion of the uterus presses down in the pouch behind the perineal body, impinging upon the rectum. This is the normal condition. So long as the pelvic organs remain in a comparatively healthy state the ligaments and natural supports are usually sufficient to maintain them in their proper positions, or with only slight depression, but in delicate females, and especially those subjected to leucorrhœa and other weakening influences the vaginal walls become relaxed and readily yield to the weight of the uterus and superincumbent viscera forced down by intra-abdominal pressure.

The uterus, bladder, or anything which presses upon the vault of the vagina may so force down the anterior wall as to produce a crumpling and partial inversion of the canal into itself, like the finger of a glove. The anterior wall first receiving the weight and pressure yields sooner and more than the posterior wall, and always in the direction of the least resistance. The pressure and weight continuing to force down the anterior wall upon the posterior, it also yields and becomes somewhat displaced downward, and thus the condition becomes abnormal or pathological. Then the anterior wall, relaxed, and lubricated by the leucorrhœal discharge, slides further and further down off the posterior wall until there is complete descent and prolapsus.

The several stages in the descent are in some cases accomplished in a few months, though generally years are necessary. But it is important to keep in mind that at first it is a slight depression only, below the normal condition in the individual which is the starting point; and this should not be overlooked, whenever the patient complains of heavy bearing-down pains referable to the inguinal,

* Read before the Ontario Med. Association in June, 1881.

hypogastric, and pubic regions accompanied by aching in the back and irritability of the bladder an examination will generally reveal a yielding of the anterior vaginal wall with displacement of the uterus and cystocele. To fully appreciate the extent and importance of these displacements, the patient should be examined in the erect posture, for many of them may entirely disappear in the recumbent position. The patient suffering from this trouble is made very miserable. She complains of great misery in and about the regions above mentioned, accompanied by considerable lassitude and weakness. She has a constant sense of a vague, dull, heavy, aching, bearing-down pain, and a feeling that something must come away. The pain is not acute, nor located in any particular spot, but appears to radiate from the pelvis as a centre in various directions. There is an entire absence of sexual desire, and intercourse is painful, repulsive and shunned; or tolerated only with loathsome submission. In addition to great weakness the power of locomotion is so impaired that walking exercise is abandoned and all employment relinquished; and, thus, the patient, if not relieved, sinks into helpless invalidism and in time becomes bedridden. In these displacements the equilibrium in the circulation is lost. The veins are obstructed and unable to convey the blood away as fast as it is thrown in by the arteries; hence the uterus becomes congested, heavy, and enlarged. The vagina being relaxed the heavy organ descends and soon becomes somewhat prolapsed. It then drags upon the vesico-vaginal septum, producing irritation of the bladder and cystocele. As the uterus continues to settle in the pelvis the circulation in the vagina and surrounding structures is more and more obstructed. The vascular plexuses in the connective tissue in the ordinary state, are remarkable for their enormous development, but in prolapse of the pelvic organs, as well as in pregnancy they become turgid and varicose, and have an almost incredible nervous capacity.

In seeking to understand the cause of pain in these displacements, it should be remembered that a dense network of nerves is spread over the uterus, bladder and rectum, and that every ligament, even the smallest attached to these parts contains muscular fibres and nerves. The displaced uterus drags upon some parts and causes pressure upon other parts exciting reflex irritation. The nervous

centres become extremely susceptible to the exhausting influences of pain and their tone is being constantly worn down. Then all the other organs, especially those concerned in digestion and assimilation perform their functions imperfectly. This condition is well described by Barnes.

In some cases the mal-nutrition and semi-starved condition induced by the dyspeptic symptoms are associated with a nervous irritability and mental aberration bordering on insanity.

This brief and imperfect description of the lamentable condition in which patients suffering from these displacements are frequently found, is not fanciful nor overdrawn. It therefore behoves every practitioner to carefully and thoroughly investigate the symptoms and cause of distress in these cases, and to resort to every means within his power to alleviate the discomfort and speedily restore the sufferer to health and usefulness.

TREATMENT—In the treatment of these cases the first step to be taken should be the reposition of the diseased organ, and retaining it in place by means of a suitable, effectual and comfortable fitting pessary. This I believe is the proper starting point, and in my experience the pessary does not come in contact with the diseased os uteri—indeed it assists to make a pouch in which the inflamed part rests and is prevented from chafing against the posterior wall of the vagina. Having restored the uterus to its normal position and bolstered it up so as to retain it in place, the suitable local and constitutional treatment can be instituted; and under their combined use a cure can generally be effected.

In the constitutional treatment we must resort to remedies which improve the general health and strength of the patient, and tend to increase the quantity and improve the quality of the blood. We must direct our attention to the stomach and digestive organs; for in these cases a permanent cure can only be effected by invigorating the system and hardening the tissues by means of good nutrition. If the diet has been too poor we must improve it before we can expect any change. We cannot here enter into a discussion concerning the various forms of dyspepsia, constipation, nervous irritation and prostration, and other frequently associated affections complicating uterine disease. The successful practitioner must have a clear knowledge of

these associated conditions and treat them intelligently, according to the indications in each case.

The Pessary—The most efficient anteversion pessary is one that accomplishes a double purpose—one that will fit the natural shape of the vagina, and keep the passage straightened out so that it cannot become "crumpled" down by the descent of an enlarged or heavy uterus, and also hold or push the anteverted organ upward and backward without stretching the vagina. The first object is very satisfactorily accomplished by the Hodge, as modified by Albert Smith, which is nicely adapted to the normal shape of the vagina, but the second object is beset with difficulties, and much ingenuity has been displayed in devising an efficient instrument for the purpose. The attachment to the Smith, invented by Prof. Thomas was a step in the right direction, but no instrument yet brought forward has met with general acceptance.

Having myself experienced considerable difficulty in getting an instrument able to give any relief in anteversion and anteflexion cases, I have devised two different spring pessaries which have afforded surprising comfort to those wearing them. The anteversion pessary consists of a Smith-Hodge instrument, as a foundation, to which is attached, by means of a spring on either side, a cross-bar which passes in front of the uterus, at the vaginal junction, and presses the organ upwards and backwards. The Smith-Hodge part I have found a very comfortable shape for keeping the vagina straightened out, while at the same time making an admirable foundation for the attachment of the spring, which can be made weak or strong according to the requirements of the case in hand. This spring pessary will, I am confident, be found sufficient for nearly all cases of both ante-version and anteflexion, especially when the latter has been previously straightened and converted, as it always should be, into an ante-version. But occasionally we meet with rebellious cases, and those complicated with prolapse of the anterior vaginal wall and bladder, which also must be supported and pushed upwards; and for such cases I have devised a still more comfortable and simple instrument. This, ante-flexion pessary, consists of two parts fastened together by a light spring; the instrument, as a whole, resembling in general shape the Albert Smith. The first part is a crescent shaped Hodge narrowed at the front end to fit the

vagina above the perineal body; the other part is shaped like the front two-thirds of a Smith, having a concave cross-bar looking towards and pressing against the anterior surface of the uterus. The curved point of the Smith projects an inch in front of the Hodge, and the other end overrides it an inch backwards; this part is forced upwards by the spring, lifting and supporting the bladder and anterior vaginal wall, while at the same time pushing the uterus backward into its normal position.

QUARTERLY REPORT ON THE PROGRESS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

THE BACILLUS OF TUBERCULOSIS.

Although Cohnheim, in the last edition of his lectures on general pathology brought forward a great array of facts which went to prove the infective character of tuberculosis, he was compelled to admit that up to the present, the virus had escaped attention. This great question is now forever set at rest by the discovery by Koch of Berlin of the true micro-organism which induces tubercular diseases. In order to see the bacilli of tubercular tissues, these have to undergo a special preparation. After the tissue or fluid is dried and warmed on a slide, it is placed for twenty-four hours in a colouring solution of 1 c. c. of methylene-blue in a 1-5 of c. c. of a potash solution diluted in 200 c. c. of water. It is then immersed in a concentrated watery solution of vesuvin which has the effect of depriving all the tissue elements of the blue color communicated to them by the methylene-blue, and leaving the bacilli of a beautiful blue. The tissues are changed from a blue to a brown by the action of the vesuvin. According to Koch's experience all bacilli are changed from a blue to a brown when vesuvin is added, except those of leprosy and tuberculosis. The tubercle bacilli are rod shaped and vary in length from a quarter to half the diameter of a red blood corpuscle. In size and shape they present a striking resemblance to the leprosy bacilli. They are more slender and pointed however. They are found most abundantly where the tubercular process is most rapid and recent. Koch found them always present in tubercular formations except in a few instances, and then only when the disease was arrested. If giant cells are present in

the tuberculous tissues the bacilli are sure to be found within them, and should the process be very chronic, they may only be found in these situations. In eleven cases of human miliary tuberculosis, the bacilli were found in the tubercles present in the lungs in every case, also in those infiltrating the spleen, liver, kidneys and the gray granulations of the pia mater. In twelve cases of caseous broncho-pneumonia the bacilli could only be found in small groups at the edge of the tubercle. They were found very abundant in cavities. In large cavities they are found present with other bacterial forms from which they are distinguished by their different behaviour on the addition of vesuvin. In ten cases of bovine tuberculosis where there were calcified nodules in the peritoneum and lungs they were present. In three monkeys who died from spontaneous general tuberculosis, they were found in the miliary nodules present in the lungs, liver, spleen and lymphatic glands. Koch inoculated 172 guinea-pigs, 32 rabbits and 5 cats with various tubercular substances; gray and cheesy tubercle from the human lung, sputum of phthisical patients, tubercle masses from spontaneous tubercular monkeys, guinea-pigs, and rabbits, from the calcified and caseous lung tissues of cattle infected with bovine tuberculosis. In not a single instance were bacilli absent from the lungs. In order to ascertain whether these organisms are the true cause of tuberculosis or not Koch, performed a large number of culture experiments, using sterilised blood-serum from the ox as his cultivating fluid. If to this fluid be added a small quantity of fresh miliary tubercle, (taking care at the same time to prevent the entrance of any other organism) and then kept at a temp. of 100° Fah. for 10 days, fine white points make their appearance on the surface of the serum. Fresh glasses can be inoculated from this the first culture. Under the microscope the greyish white masses on the surface of the serum are found to correspond exactly to the bacilli in tubercular masses. If a small quantity of the infected fluid be injected into the anterior chamber of the eye or under the skin of an animal or directly into its blood, there results a general tuberculosis which runs a much more rapid course than when the injection is made with ordinary tuberculous material. The first symptoms in guinea-pigs make their appearance in about ten days after the inoculation. Cats and dogs which ordinarily en-

joy an almost complete immunity from tuberculosis are quickly and surely affected.

The parasitic nature of tuberculosis being thus fully established, there remains to be answered; from where do the organisms come, and how do they get into the body? From a series of experiments it was determined that tubercle bacilli only develop at a temp. of from 30° to 41° C. Exposure to a temp. of under 30° and over 42° C. had no effect whatever on them. They differ in this respect markedly from the bacilli of splenic fever which develop readily at low temperatures. It follows from the above experiments that the bacilli of tuberculosis are incapable of development outside of the body. It is very probable that these organisms find their entrance into the system with the inspired air. When it is remembered how numerous they are in cavities it is not at all surprising that the outside air is contaminated with them. Koch found them present in about half the cases of phthisical sputa that he examined. The sputum of patients not suffering from phthisis gave negative results. The bacilli holding sputa when inoculated as surely induces tuberculosis as a piece of miliary tubercle. Even, when the sputum is thoroughly dried it retains its virulence. Koch induced general tuberculosis in four guinea-pigs by the injection of sputum which had been in a dried condition for eight weeks.

The growth of tubercle bacilli is very slow, and for this reason, in order to infect an animal with certainty it is necessary to introduce the virus into the peritoneal cavity, subcutaneous tissues or the anterior chamber of the eye. Infection from the surface of a wound or from the cornea, is very exceptional. This is the reason why persons are not infected who having cuts on their hands make post mortem examinations of patients who have died from phthisis. The two great sources of tuberculosis are (1) from the sputum, clothes, &c., of the infected person; (2) from the lower animals. According to veterinary surgeons tuberculosis of the mammary glands of cows is not at all rare. In cases of this kind there would be direct admixture of the milk and the tubercle bacilli.

These admirable researches of Koch had not been a week published before they were confirmed by another eminent worker in the same field of pathology—Baumgarten of Königsberg. A short time previous he discovered similar organisms in the tubercular tissues of guinea-pigs.

THE PATHOLOGY OF PNEUMONIA.

Ever since the discovery by V. Recklinghausen and Lukomsky of a micro-organism in erysipelas, observers have been at work trying to find a similar cause for croupous pneumonia. The similarity between the two diseases led Klebs to investigate this matter. He discovered spherical monads in the secretion of the bronchial tubes and in the fluid of the central ventricles in a case of croupous pneumonia. Eberth found, in a case of suppurative meningitis, complicated with pneumonia, micrococci in the pulmonary exudation, and also in the inflamed pleura and pia mater. Koch, in a case of acute pneumonia following relapsing fever, found similar organisms in the alveolar exudation and in the capillaries of the lungs and kidneys. The latest investigator in this department of pathology is Friedlaender, of Berlin, who has investigated eight cases of acute genuine pneumonia, and in every case with a successful result. The search was made in the fibrinous effusion of the bronchial tubes and in hardened sections of the lungs and pleura.

The micro-organisms found were almost constantly of similar size and form, ellipsoidal micrococci, almost a micro-millimeter in length and one-third less in breadth. They were generally found in pairs, and sometimes in long chains. Within a single alveolus thousands of them can be seen during the stage of red hepatization. During the stage of grey hepatization they are not so numerous. In the majority of the cases they were not discovered in the alveolar or bronchial walls. In one case (a typical one), a very large number of them were found in the lymph spaces of the interstitial connective tissue and in the endothelium of the lymphatic vessels. The lymphatics appeared to the naked eye as silvery threads. The presence of colonies of micrococci in the lymphatic vessels is, according to Friedlaender, of great significance, as it demonstrates that these micro-organisms can pass into the current of the circulation and develop in the living tissues.

In answer to the question, Are these organisms the cause of the pneumonia? Friedlaender observes that anatomical investigations cannot alone give a certain answer. That pneumonia is caused in this way is favored by the above considerations and the analogy between it and other acute infec-

tious diseases. Its frequent occurrence as the result of cold ("Erkältungspneumonie") constitutes a difficulty in accepting this theory of its causation.

It is, therefore, as yet unknown whether this micro-organism is a primary formation or a result of the inflammatory process in the lung.

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LACERATION OF THE PERINEUM, INVOLVING THE SPHINCTER AND THE RECTO-VAGINAL SEPTUM — OPERATION.

BY N. WASHINGTON, M.D., ORANGEVILLE ONT.

The case I am about to describe came under my notice on the 23rd of October, 1881, during her confinement. Mrs. C., æt. 32; healthy during the greater part of her life until she met with the above mishap, which occurred during her first delivery with instruments. She has been confined three times since then, at full term; children all living. During her last confinement, on examination, I found to my great surprise an extensive laceration. The rent involved the sphincter ani and extended up the recto-vaginal septum about $1\frac{1}{2}$ inches. On making due inquiry, I found that she had suffered this infirmity for over nine years, unable to control the action of the bowels in the retention of the fæces or the escape of flatus. This state of things necessitated close confinement, in fact almost absolute seclusion from society. This, in connection with the inexpressible abhorrence and loathsomeness of herself, produced a careworn look, and very materially affected her health. Under these distressing circumstances she very willingly consented to an operation. This was hastened by the period of lactation, after this confinement, being much shorter than usual. Therefore on the 1st of February, 1882, assisted by Dr. Carbert, who carefully administered the anæsthetic, which consisted of chloroform, the operation was commenced. The day before, necessary arrangements had been made by the administration of a tablespoonful of

castor-oil, which acted freely, and on the following morning one grain of opium in powder. Prior to the administration of chloroform, an ounce of brandy in some water was given, a practice I would recommend to every practitioner before the administration of any anæsthetic. The patient being fully under the influence of chloroform and the bladder emptied, the operation was commenced by removing the hair in close proximity to the laceration. With a pair of scissors curved on the flat and a scalpel, I carefully dissected a thin film from the margins of the rent in the recto-vaginal septum, then by cautious dissection with the scalpel and occasionally with the scissors, from below upwards, I denuded the lacerated surfaces. This I found to be somewhat tedious, owing to the uneven surfaces, which were full of elevations and depressions as if considerable sloughing had taken place at the time of the laceration. The operation was also somewhat hindered by free oozing of venous blood which was occasionally very profuse, owing no doubt to the fact that the parts are very largely supplied with valveless veins. The occasional spirting of a little arterial twig, also delayed the operation slightly, but was readily controlled by torsion, in the absence of "serrefines," which I greatly prefer. Having thoroughly prepared the surface, I then proceeded to close the wound or rent by means of a curved perineum needle (curved at right-angles to the holder or handle), using a carbolized catgut ligature in the recto-vaginal septum. The next ligature was introduced so as to embrace the lacerated sphincter muscle, being introduced by a curved perineum needle (curved parallel with the handle). It was introduced on a level with the lower margin of the anus, and about half-an-inch to the left of it, and carried backwards and upwards so as to embrace the posterior wall of the vagina. From this point the needle—armed of course with silver-wire—was returned to the opposite side and made to emerge at a corresponding point to its introduction. The remaining sutures, three in number, were passed in the same arched direction, each suture rising about half-an-inch or possibly a little more above the preceding, and the last one including a portion of undenuded mucous membrane of the posterior wall of the vagina. The ends of the sutures were clamped with number two perforated shot. The sutures arched in this manner, including so much tissue,

serve two purposes, first, that of giving greater firmness to the hold of the ligatures, and secondly, aiding very materially in checking hæmorrhage, which occasionally is very troublesome. I introduced the catheter again to draw away any residuum of urine, and after tying the knees together in the usual manner the patient was removed to bed, and one grain of powdered opium given to allay the irritation.

The after treatment consisted in carefully watching the patient and attending to any little irregularity that might occur. One grain of opium was given every four, six or eight hours, as the symptoms demanded. The urine was removed twice every twenty-four hours, and this was very much facilitated by attaching a piece of rubber tubing to the end of the catheter. The diet was principally milk, eggs or the white of egg, beef tea, toast, biscuit, etc. The greatest difficulty in the after treatment was chiefly due to the collection of gases in the intestines, not only to the very great annoyance of the patient in giving rise to pain and producing a false alarm, but to me also in removing or causing a free exit, which was best facilitated by the introduction of a male gum-elastic catheter, and allowing it to remain *in situ*. At the expiration of eight days I injected four ounces of olive oil and allowed it to remain six hours. I then gave a dose of oleum ricini, followed in a few hours by a soap-and-water enema. This was of no avail whatever. The rectum was distended with hardened fæces which no oil could penetrate. After laboring a considerable time without effect and gastric trouble setting in, I concluded to remove the fæces. Next day I took out some of the upper stitches and found that union had taken place perfectly, with the exception of a small place included between the upper two stitches. The circular anal ligature I left in a few days longer than is usually recommended, but without the least inconvenience, however, to my patient, and I firmly believe of great advantage in assisting to strengthen the anus or new sphincter during defecation. After the fifteenth day I removed the circular anal ligature, and from that time nature has become more accustomed to the "new departure."

At present the health of my patient is very good and she has so far recovered, that she can now say to her formerly uncontrollable fæcal evacuations, "Thus far shalt thou go and no further." Besides

that fearful dread which hung over her head and that detestable loathsomeness being removed, she is enabled to go out into society with a free heart and a cheerful countenance.

The operation occupied three-quarters of an hour, but the time could have been materially shortened had the perineum needles been longer, and had I been supplied with "serrefines" to control the jetting arteries.

There is a degree of satisfaction attending an operation of this kind, in contemplation of the terrible condition of the patient to herself as well as to her relations and her husband, and the happy union which has been effected "which knows no misery nor feels no shame."

Correspondence.

MEDICAL BENEVOLENT SOCIETY,

To the Editor of the CANADA LANCET.

SIR,—The article in the May issue of the LANCET, on the rewards of professional labour, revived in my mind a subject I have thought of for several years, that is, the possibility and the judiciousness of forming upon a solid basis, a Medical Benevolent Society, whereby each member of the profession could, by the payment of a yearly sum, leave something more than a name to his widow and family, at his death. The rates of Life Insurance Companies are so high as almost to preclude the possibility of his doing so. For instance, a man of thirty years of age, in order to insure a couple of thousand dollars at his death, will have to pay about forty or fifty dollars a year, quite a rent.

Now, I am not sure how many registered physicians there are in Ontario, but we will assume that there are two thousand—the payment of, we will say, two dollars apiece upon the death of any member of the profession, would be a very material assistance to his family. I would very much like, Mr. Editor, to see something of this kind done, and I beg that you will use your influence and the influence of your journal, to bring it to the notice of the profession, that we may have a full expression of opinion upon it, and by so doing you will much oblige,

Yours truly,

MEDICUS.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The regular meeting of the Huron Medical Association was held in Clinton, on Tuesday, April 4th, Dr. Holmes, of Brussels, president, in the chair. The following members were present: Drs. Holmes, Worthington, Gillies, McLean, McDonagh, McMicking, Williams, Scott, Graham, Duncan, Hurlburt and Stewart.

Dr. Duncan of Seaforth exhibited a second well-marked example of *Jacksonian Epilepsy*. The patient, a female child, aged 38 months, was in good health, until she was eleven months old, when the present difficulty commenced suddenly with convulsions confined to the right arm, leg and right side of the face, which lasted, it is said, for six hours, and was followed by paralysis of the convulsed parts of some weeks duration. From this time up to the end of the child's second year, no regular fits occurred, but soon afterwards they were very marked, and when very severe the left side of the body was affected, but it was never paralyzed like the right side. Speech was confused and incoherent after the attacks. For several months the attacks only occurred once a month. During last October they became very frequent—as many sometimes as fourteen in a single day. Since, she has been taking bromide of potassium, and now they only happen once in the six weeks. During the attacks, the head is drawn to the right side, and the eyes are turned to the left. When the child awakens her right extremities are found to be paralyzed. The paralysis however lasts but a few hours as a rule. The child is often fretful, and when gentle pressure is made on the left ear she becomes quiet and falls asleep. Memory and intelligence good. She formerly appeared to be conscious during the attacks, but lately she has not been so. Three members of her grandfather's family were epileptic.

Dr. Graham, of Brussels, showed a woman, aged 49, who has Dupuytren's contraction of the little and ring fingers of both hands.

Dr. Gillies, of Teeswater, showed a well-marked example of infiltrating carcinoma of the right breast with secondary deposits in the pleura in a woman, aged 47.

Drs. Stewart and Hurlburt, of Brucefield, showed

a boy, aged three-and-a-half years, with left hemiplegia following unilateral (left) convulsions. The child who was convalescing from scarlet fever was seized on the 14th of January last with convulsive movements of the left arm, leg and face, which lasted for eight hours. On the following day the child was still unconscious with a pulse of 140, and a temp. of 104°F., but there was no return of the fits. On the 16th of January, the left arm and leg were found to be completely paralyzed, in which condition they remained for a week. Since then, there has been a gradual improvement, but the child still drags his left leg. The left arm has almost completely recovered with the exception of some of the complex hand movements. The urine never contained any albumen, nor was there discovered at any time any deficiency in the quantity of urea. It is probable that both the convulsions and paralysis in this case were brought about by a meningeal hemorrhage.

ONTARIO BOARD OF HEALTH.

The first meeting of the Provincial Board of Health, constituted by the Act passed at the last session of the Ontario Legislature, was held in Toronto on the 9th ult., the following members comprising the Board:—Dr. William Oldright, Toronto, (Chairman); Dr. H. P. Yeomans, Mount Forest; Dr. F. Rae, Whitby; Dr. C. W. Covernton, Dr. J. J. Cassidy, and Dr. J. Hall, Toronto; and Dr. P. H. Bryce, Guelph, Secretary. The Chairman delivered his opening address, which was published in full in the *Toronto Mail*. The small pox epidemic in Windsor was the first matter discussed, and instructions forwarded to the local Board of Health. A letter was read from Dr. Baker, Secretary of the Michigan Board, respecting immigrant inspection. Dr. Cassidy read a report of the proceedings at the Sanitary Convention lately held at Greenville, Mich. Drs. Covernton and Yeomans, who had been deputed to investigate the cause of the prevalence of typhoid fever at Sarnia, read their report. They attributed the cause to the impure water supply. Recommendations were adopted which will be forwarded to the town council. A committee was appointed to draw up a set of by-laws for the government of the Board.

In the evening session, after routine, it was moved by Dr. Cassidy, seconded by Dr. Yeomans, "That advice be telegraphed to the Mayor and Police Magistrate of Windsor concerning the epidemic of smallpox there, and that a copy of the Health Act of 1882 be mailed to these gentlemen." Carried.

It was then moved by Dr. Rae, seconded by Dr. Cassidy, "That the report from the Committee of the Whole, concerning the report of the Committee of Investigation appointed to examine into the epidemic of typhoid fever in Sarnia, be received and adopted; and further, that a copy of the report and its endorsement, with recommendations by the Board, be forwarded to the Mayor of Sarnia." Carried.

The Board met again May 10th. After routine, the secretary was instructed to write to Dr. Coventry, of Windsor, asking him to take every precaution against the spread of small-pox. The Committee on By-laws reported as follows: That meetings of the Board be held in Toronto in February, May, August, and November; that committees be appointed on food, drinks, and their adulterations; on water supply, poisons, explosives, etc. Dr. Yeomans read a draft circular to be sent to the clerks of the different municipalities in the Province, asking that sanitary measures be strictly enforced. Dr. Covernton said that if these measures were enforced they would have as perfect a system of sanitary legislation as existed in any part of the continent. It was decided to have the circular printed and distributed. It was also decided to have extracts from the statutes bearing on public health printed and circulated with the circular. There was some discussion on the appointment of a medical practitioner to examine immigrants passing through the city, but no steps were taken, the matter being left to Hon. Mr. Hardy. At the meeting in the evening a resolution of the Michigan Board of Health, asking the co-operation of the Ontario authorities with regard to the inspection of immigrants, was submitted. A proposal for the registration of statistics regarding diseases was referred to a committee, to report at the June meeting. Circulars were sent to different municipalities and medical men, calling their attention to the provisions in the Health Act. Dr. Covernton explained the Rochdale system with reference to

the disposal of excreta and also advocated the establishment of public urinals. The chairman mentioned that Dr. Anderson had been appointed health officer at Niagara and that Niagara was taking steps towards aiding the work of the Board.

May 11th, 1882.

The Board met again this morning to complete unfinished business. After routine, the secretary was instructed to procure the necessary exchanges of sanitary literature, and also to procure a seal for the Board.

Moved by Dr. Covernton, seconded by Dr. Yeomans, and carried:—"That the digest of the Provincial laws for the guidance of municipal councils relative to the powers vested in them by the statute for the suppression of infectious and contagious diseases be submitted to the Attorney-General for his approbation, and that three thousand copies be printed for distribution; also, that three thousand copies of the circular to clerks of municipallities be printed, instead of one thousand."

A resolution was also moved by Dr. Covernton, seconded by Dr. Yeomans, and carried, recommending the adoption of a by-law by city or other municipal authorities to prevent the construction of any building on a site which has been filled up with garbage, or other offensive material, until the soil has been examined and approved of by the city engineer or health officer.

It was moved by Dr. Yeomans, seconded by Dr. Covernton, and carried, that the Secretary be instructed to procure a supply of reliable vaccine for the use of medical practitioners.

The question of establishing a vaccine establishment in this city was brought up, and a special committee was appointed to make the necessary enquiries and report at next meeting.

An account for \$105 for travelling expenses, incurred by members of the Board, was passed.

A suggestion by Dr. Wells, of Barrie, that in order to prevent the spread of contagious diseases, all premises where such diseases have existed should be disinfected, was approved of. On motion the Board went into Committee of the Whole to consider the supplementary report regarding the water supply and sewerage of Sarnia. The Board recommended that instead of taking the water from Sarnia Bay, as at present, the Corporation should extend a water pipe into Lake Huron, a distance of only two miles from the city.

After votes of thanks to the physicians, members of the Council and inhabitants of Sarnia; Dr. H. B. Baker, secretary of the State Board of Health, Michigan; Mr. John K. Allen and Dr. Nicholson, Secretary's Department and others, for the courtesy shown to members of the Board during their recent visit to their respective localities, the meeting adjourned.

Selected Articles.

LINEAR RECTOTOMY.

BY JOHN ASHHURST, M.D., PHILADELPHIA.

The case I bring before you to-day, gentlemen, is one of some standing. The patient, a middle-aged man, has been suffering from several openings near the anus, causing him considerable pain and inconvenience.

I made a superficial examination a few days since, in which I thought I detected, besides the sinuses, a stricture situated low down near the sphincter. This feeling of constriction may, however, have been due to the violent contraction of the sphincters, the patient not being etherized, and the pain consequent upon the examination being considerable. To-day I propose to have ether administered, and to make a thorough examination, and if I find a stricture I will perform the operation introduced by Verneuil under the name of *linear rectotomy*, using the *ecraseur* as recommended by that surgeon. In some cases, where the stricture is high up, we must rely on dilatation by means of rectal bougies. I have brought several of these with me that you may see the various instruments used in strictures of the rectum; they may be either simply conical, or provided with bulbous extremities, and by their proper use much good may be accomplished, and the patient afforded great relief.

Linear rectotomy has been performed where the stricture has extended as high as four inches above the anus; this is as high up as it is safe to go without risk of opening the peritoneum, and even here, should hemorrhage occur, there would be great difficulty in checking it, so that I advise you to rely on dilatation and not on rectotomy if the stricture extends beyond two-and-a-half inches. In this case I find the stricture near the anus, and the operation will therefore not be particularly dangerous, while it will afford the best prospect of relief. Contrary to what is generally supposed, fistulæ, in cases of rectal stricture, open more often below the stricture than above.

It is very easy to understand how an obstruction in the canal might by the retention of irritating materials cause ulceration and fistulæ, communicat-

ing with the bowel above the stricture ; but it is not so easy, at the first glance, to see why they should open below ; this is, however, as I said, very commonly the case, and the fact has a physiological explanation.

In the latter part of the normal act of urination, we have one or more rapid contractions, termed by French writers the "*coup de piston*," which expel the last drops of urine, but if from prostatic obstruction, or other cause, this be wanting, we have dribbling ; also, at the end of defecation we have a similar act, as you have all undoubtedly noticed in the horse, in which there is an extrusion of the whole lower part of the mucous lining of the bowel, by which the rectum is entirely cleared of fecal matter. If now there is a stricture present, this act is incomplete, and there always remain some particles of feces below the constriction, which act as irritants, and finally cause abscess and fistula.

The flow of mucus from the rectum, which you observe, is very characteristic of stricture. I find on examination, as I said, a stricture a short distance above the sphincter. I cannot trace either of the two discharging sinuses directly into the rectum, but by slitting up their superficial portions may be able to find their openings ; one communicates with the gut below, and the other above, the internal sphincter, but both below the stricture. I will open up this sinus towards the median line, and then introduce the chain of Chassaignac's *ecraseur* through the sinus, and into the rectum above the stricture, will divide the tissues in the median line, and in this way avoid making unnecessary wounds. You must proceed slowly after the *ecraseur* once begins to bind ; the best plan is not to follow any given plan by the watch, —some surgeons advise making a turn every quarter of a minute—but to pay attention, and when the instrument binds or is arrested, wait a few seconds, and then turn again, until it again binds, using quick, short, jerking turns. If you proceed too rapidly you are liable to have bleeding ; but by adhering to the above rule I have never had troublesome hemorrhage after the use of the *ecraseur*.

This operation has been modified by the wire galvano-cautery, the effect of which is to cause a slough over the entire surface of the wound, and an increased likelihood of secondary hemorrhage. Many gynecologists, who formerly used the cautery, are now returning to the use of the simple *ecraseur*. I prefer, too, the chain to the wire *ecraseur* ; the wire is very liable to break, and the operator may then be compelled to complete the operation with the knife or scissors. With the chain, on the other hand, there is no annoyance of this kind, and by proceeding slowly there is no danger of hemorrhage. The *ecraseur* is a very useful instrument in its place, but its value has been exaggerated by some surgeons, who have even gone so far as to

employ it in lithotomy and in amputation of the thigh. When, however, you have a somewhat narrow, vascular portion of tissue to divide, and especially if it is deeply-seated, the *ecraseur* is safer than the knife. One difficulty which you will meet with in its use, will be the drawing up of shreds of tissue into the instrument, which clog its motion, and require it to be freed with blunt-pointed scissors. The stricture having now been divided without bleeding, we will dress the wound by placing in it strips of lint to prevent its uniting superficially, and allow it to heal by granulation.—*Medical Bulletin, Feb., 1882.*

MODES OF OBTAINING PRACTICE.

The *Daily Graphic* gives the following humorous sketch of the various modes adopted, by some medical men, of obtaining practice :

Patient—Now, doctor, how would you define "medical science"?

Doctor—Well, medical science sometimes consists in making a person think he's very sick when he isn't, and at other times it tells people there isn't much the matter with them when they're half dead. Sometimes all this depends on the size of the patient's pocket-book. That in medicine is a very important and vital organ. The great aim, however, in my experience, is to have as many folks sick as possible, and to keep them sick.

Patient—What is your idea as to the naming of diseases ?

Doctor—To change the name at least once in ten years.

Patient—Why ?

Doctor—Because old names, such as "croup," "lung fever," etc., get too common. People are too apt to find out how to treat such diseases themselves. But when we clap a Latin name on the old complaint it mystifies the public, scares them, and sets them all adrift again. There'd be millions of dollars lost to the medical profession if we didn't change the names of our complaints occasionally.

Patient—Suppose a well-to-do person is a little out of sorts and comes to you with an idea that something very serious is the matter with him, what will you do ?

Doctor—This affords me some of my best paying practice. In such cases I "break up the disease." I tell him that he is seriously threatened with something awful in Greek or Latin, composed of two words, seven or eight syllables and one hyphen. Then I put him on a course of harmless drugs, to be taken at regular intervals of two hours. I put him also on a strict system of diet and keep him in bed. It requires about a week to "break up the disease." "Such prevention is better than immediate cure." "It pays better, too."

Patient—When you are called in and are yourself uncertain as to the nature of the patient's sickness, what do you say to his inquiring friends or family?

Doctor—The proper course in all such cases is to look wise and grave, and say as little as possible. We leave some medicine, of course. How can one be a doctor unless he always gave medicine? The medicine quiets the patient's mind and those of his friends. Patients, to tell the truth, are as bad as doctors in this respect. They will insist on having some medicine when they do not need it. But it never pays for a doctor to talk much.

Patient—If you are called in after the sick person has been for several days previous in the care of another physician, and the patient dies, what is your course?

Doctor—Invariably to regret to particular friends, in a subdued manner, at the proper times and places, that I had not been called in before the disease made such headway.

Patient—Do you not think in many cases of sickness that nature, aided by plenty of rest and good nursing, would effect a cure?

Doctor—We do not encourage nature in such practices. It would ruin the profession.

Patient—Now, if you treat a patient for you don't exactly know what, and he recovers, don't you take all the credit for such recovery?

Doctor—Sir, that is a professional secret.

Patient—Can you tell me, doctor, why it is that an expensive office, a horse and carriage, and a residence in the fashionable quarter, are practically considered as of much, if not more, importance to a doctor than his skill or experience in his art, and that a doctor without the capital to set himself up in this manner, be his skill ever so great, can never hope to attain a fashionable practice?

Doctor—Certainly I can. It's custom and stupidity. But stupidity makes money for us. Are we going to try and cure stupidity? Kill the goose that lays for us golden eggs? Never.

Patient—What other means have you for stimulating and developing practice?

Doctor—A good doctor will always have a reputable standing in some respectable church. He will at least hire a pew—front pew if possible—and send his family regularly. Of course, he must have a family. A doctor without a family is unsafe—hasn't given any hostages to society. He needn't attend church regularly himself. If he has much practice, it isn't supposed he can. The sick man must be visited, Sunday or no Sunday. And when he does come to church, it is well to have him called out occasionally—case of sudden illness—doctor sent for; so hard on the poor man, too, when he has so little opportunity to worship. Yet, no rose without its thorns. No—I mean no

cloud without its silver lining. When the doctor is called out of church all the congregation will see he's in demand. It's a splendid advertisement.

Patient—Who are the most permanent and lucrative patients?

Doctor—Women.

Patient—Why?

Doctor—Well, I think sometimes they had rather be sick and under a doctor's supervision than not. Another reason is they are more perverse than men in clinging to the causes of their ailments. A man better realizes that without health he cannot carry on his business. So when he finds out the cause of disease he'll set to work to stop it. Tell a man he needs more fresh air and he'll try and get it. Tell him he needs more out-door exercise and he'll try and take it. But most women won't. They squeeze themselves into corsets, and insist on being cured of ills caused by corsets with pills. They'll go out in cold, damp weather in costumes which show off their figures and without cloaks, when the cold drives all the blood from their skin, for hours. They'll insist on being cured by doctors and pills. They'll wear tight shoes, which deform and pain their feet, and this plan drawing indirectly from their strength—they'll insist on being cured with more pills. Nor is this all. But I shall tell no more. It is giving the "profession" away. These things involve our most lucrative secrets. I shan't be thanked now by thousands of brother medical nurses of disease for what I have told. Go to, young man! Go to! You've got enough, and how in the world you've managed to worm out of me what you have is a mystery. Get thee to a nunnery! I'll never more have one such as thou pumping from me that information which is to me my professional life-blood. Thou art an interviewer disguised in the likeness of a sick man. Go to!

TREATMENT OF DELIRIUM TREMENS.

Dr. Whittaker (*Cin. Lancet and Clinic*), gives the following treatment of this affection:—

Chloral is the cardinal remedy in the treatment of delirium tremens. A single large dose of it will often jugulate the disease. Less than thirty grains is useless, and it is wise to give a whole drachm at once. One large dose is infinitely better than repeated small doses, and there is no danger in the use of it in this disease, provided, I repeat it again and again, provided there is no weakness at the heart. But drunkards, you say, are the very individuals who have fatty hearts. So they do, and hence with chloral as with every other remedy, you must pick out your cases. A young strong man, like this, suffering with his first attack or attacks, is not yet the subject of this

lesion. It is the old drunkard, the habitual sot, who more especially suffers in this way, the gross, corpulent, heavy, sluggish and thoroughly selfish individual who oftenest has the fatty heart. Put your ear down to the chest and listen to the sounds of the heart. If they are muffled, if the pulse is feeble, if it fade away entirely when you hold up the arm at right angles to the body, you will give no chloral to the patient.

What then will you give? Opium. Opium is the anodyne for the more chronic case, or for the acute complication in a chronic case. Give morphia preferably and give it hypodermically that it be not rejected. Give in an average case one-half a grain of morphia in this way, and having waited ten or fifteen minutes for its immediate effects, you may leave the case for two or three hours to the assistants. If there shall have been still no sleep, and the pupils are not contracted, you may give one-fourth of a grain more. Here you will stop for four hours at least, when you will wish to see the condition of the pupils again. If they are now contracted and the breathing is slow, your vigil with the case begins. Should these danger signs continue too long or grow worse, you will have to keep the patient awake. You will do this best, not by flagellation, not by dragging the patient about the room, nor forcing him between two men to walk the streets, nor by splashing him on the head with water, but by simply calling his name aloud in his ear. This you must repeat and repeat until the respirations come to ten to the minute at least, as you count it with your watch in your hand. Perhaps you may have to give much more morphia than I have indicated to secure the sleep, perhaps you may be so situated as to have the patient take the tincture of opium in divided doses over a longer time, perhaps you may have to combine the opium with something else, perhaps you may have a case to which you do not dare to give opium at all, because of the complicating pneumonia or meningitis; all these things you will have to determine, each man for himself, and each case for itself, and upon your judgment here as elsewhere will rest the result of the case and with you.

Three remedies there are with which to combat delirium tremens. Two we have mentioned already. The third is Digitalis. Digitalis is for the fatty heart, the weak pulse, the cold surface, in short, the collapse. Give in preference the infusion, freshly made, a dessertspoonful to a table-spoonful every two, three or four hours, how can anyone say, how much or how often in his judgment is best unless he sees the individual case.

The bromide of potassium is for the next day, for the day after the sleep, or for a mild case during the day, when the drug for the sleep is for the night.

But you are not yet done with the treatment of the case. The sermon is now to be preached,

and you are the best preacher, better than any temperance fanatic. Because you can appeal to the revelations of science regarding the effects of alcoholism, appeal to the reason, if there is any left; while the other preachers may appeal only to the emotions which, even when strongest, fleet like the clouds. That we may ourselves, however, not dwell in generalities among the clouds, let me say that you will advise your patients to drink wine and beer instead of the stronger preparations of alcohol, for to the Southern peoples of Italy, Spain, and South Germany, where wine and beer flow like milk and honey in the promised land, delirium tremens is almost unknown.

PUERPERAL HEMORRHAGE.

Dr. Theophilus Parvin gives (*American Practitioner*) the following case, in which he obtained excellent results from hypodermic injections of ether:—

Mrs. K., thirty-seven years of age, was delivered of her third child at 7 a.m. The physician in attendance having failed to remove the placenta, and excessive hemorrhage occurring, I was sent for and saw her at 9 a.m. I found her almost pulseless, countenance with a death-like pallor, bathed with perspiration, restlessly tossing her arms, complaining that she could not see, that she was dying. Whiskey and ergot had been given to her freely, and caused occasional efforts of vomiting. My first step was to remove the pillow and bolster from under her head, and to have the foot of the bed raised, so as to facilitate the flow of blood to the anæmic brain. Next, placing one hand on the abdomen, I could not feel the uterus. It was without form and flaccid as the abdominal wall itself. The other hand was introduced into the vagina, and from the vagina into the uterine cavity. I found that the cord had been torn loose close to the placenta, in vain efforts to extract the latter, which was free in the uterine cavity. The uterus was completely relaxed, as flabby and soft "as a piece of wet tripe." In vain I sought, by compression and friction through the abdominal wall with one hand, and by movements of the other within the uterine cavity, to excite contractions. I then removed the placenta and injected water at the temperature of 110°, but still there was no response from the muscular fibre of the uterus, although the patient complained of the heat of the water as it flowed out through the vagina, and her exhaustion became still more alarming.

Remembering the very favorable results obtained by Hecker, in uterine hemorrhage, from hypodermic ether, I injected twenty drops of sulphuric ether, and repeated the operation at intervals of from five to ten minutes, until one drachm and a half of the liquid had been thus introduced. Meantime

direct stimulation of the uterus by friction and compression externally, and by a hand in the uterine cavity, was continued, and about the time the last hypodermic was used contractions first manifested themselves, and within half an hour the uterine contraction was nearly as complete as is observed after normal labor.

Of course, the patient's convalescence was very tedious. It was three weeks before she could sit up in bed without fainting. Nevertheless, her recovery was uninterrupted.

Dr. Parvin concludes as follows: "But, whatever method may be resorted to for the arrest of the hemorrhage, it is of the first importance that the patient should be restored from her profound prostration. Among the means of this restoration probably none is so prompt and effective as hypodermic ether.

CHOREA TREATED BY ARSENIC.*

Dr. F. Minot (*Boston Med. Journal*) reports the following case: Maud B., a little girl nine years old, entered the Massachusetts General Hospital, April 20th, 1881. Her father was in good health; the mother died of some disease of the uterus; her father's sister had chorea for a year. The child was of a nervous temperament, but has always been well. She had never had rheumatism. The present attack began March 15th, while the patient was at boarding-school, and the power of speech began to be lost April 1st. On her entrance into the hospital the child was unable to speak. On trying to walk she would fall down and with difficulty could get up again. There was incessant incoördinate twitching of the legs, arms, and facial muscles. She could not feed herself, articles of food dropping from her hands. The movements were not more marked on one side than the other. During sleep the motions still persisted, though to a much less degree than while she was awake. She was not emaciated, nor especially anæmic. The intelligence was good. She readily understood what was said to her, though unable to reply.

There was no cardiac murmur. The appetite was good; bowels constipated. Two examinations of the urine showed the color to be pale; specific gravity 1013 and 1027; very slight trace of albumen, the urea at first diminished and then increased; sediment not abnormal.

The treatment consisted in suitable nourishment, exercise in the open air, and the solution of the arsenite of potash three times daily, beginning with three drops at a dose, which was gradually increased to seven drops, and then, on account of gastric disturbance, diminished to five drops. During the last week of her stay in the hospital

she took, in addition, three grains of the citrate of iron and quinine before meals. Three days after taking the arsenic she became much more quiet during the night. April 26th (sixth day) she spoke for the first time. April 29th (ninth day) there was "marked improvement in all respects." May 20th she was well and ready for discharge, though she did not actually leave the hospital until the 30th. No exciting cause for the disease is known.

The total duration of this case was about fifty-six days; the time from the first dose of arsenic to recovery was twenty-nine days. If the remedy did not abridge the duration of the disease, its beneficial effects were immediate and striking.

REMOVAL OF BENIGN TUMORS OF THE BREAST WITHOUT MUTILATION.—Prof. T. Gaillard Thomas Surgeon to the New York State Woman's Hospital, contributes to the April number of the *N. Y. Med. Four. and Obstet. Review*, a paper, in which he expresses himself in favour of removing benign tumors of the breast as a rule, because the mere presence of a tumor in the breast usually renders the patient apprehensive, nervous, and often gloomy, while with our present improved methods of operating, the patient is exposed to slight risks, the danger of the growth of the tumor is removed, and with this disappears at the same time that of the subsequent degeneration of a benign into a malignant growth. If in addition to these advantages we can add the avoidance of all mutilation to the person, we have strong grounds for departing from the practice of non-interference.

The method of operation described, Dr. Thomas has practiced thus far in a dozen cases. He distinctly states that it is entirely inappropriate for tumors of malignant character, and that it is applicable neither to very large nor to very small benign growths, being insufficient for the former and unnecessarily radical in its character for the latter. The growths for the removal of which he has resorted to it have been fibromata, lipomata, cysts, and adenomata, and have varied in size from that of a hen's egg to that of a duck's egg, or a little larger. The operation is thus performed:—The patient standing erect and the mamma being completely exposed, a semicircular line is drawn with pen and ink exactly in the fold which is created by the fall of the organ upon the thorax. This line encircles the lower half of the breast at its junction with the trunk. As soon as it has dried the patient is anesthetized, and with the bistoury the skin and areolar tissue are cut through, the knife exactly following the ink line until the thoracic muscles are reached. From these the mamma is now dissected away until the line of dissection represents the chord of an arc extending from extremity to extremity of the semicircular incision. The lower half of the mamma which is now dis-

*Read before the Section for Clinical Medicine and Pathology of the Suffolk District Medical Society, March 9, 1882.

sected off, is, after ligation of all bleeding vessels, turned upward by an assistant and laid upon the chest-walls just below the clavicle. An incision is then made upon the tumor from underneath by the bistoury, a pair of short vulsella forceps is firmly fixed into it, and while traction is made with it, its connections are snipped with scissors, the body of the tumor being closely adhered to in this process, and the growth is removed. All hemorrhage is then checked, and the breast is put back into its original position. The outer or cutaneous surface is entirely uninjured, and the only alteration consists in a cavity at the former situation of the tumor. A glass tube with small holes at its upper extremity and along its sides, about three inches in length, and of about the size of a No. 10 urethral sound, is then passed into this cavity between the lips of the incision, and its lower extremity is fixed to the thoracic walls by india rubber adhesive plaster, and the line of incision is closed with interrupted suture. In doing this, to avoid cicatrices as much as possible, very small round sewing-needles are employed. These are inserted as near as possible to the edges of the incision, and carry the finest Chinese silk. After enough of them have been employed to bring the lips of the wound into accurate contact, the line of incision is covered with gutta-percha and collodion, and the ordinary antiseptic dressing is applied. If the glass drainage-tube acts perfectly there is no offensive odor to the discharge, and the temperature does not rise above 100°. The tube is in no way interfered with until the ninth day, when the stitches are removed. If, on the other hand, the tube does not appear to perform the function satisfactorily, it is manipulated so as to cause it to drain all parts of the cavity, and warm carbolized water is freely injected through it every eight hours. On the ninth day, when the stitches are removed, the tube is removed likewise.

TREATMENT OF GOITRE WITH ERGOTIN.—M. Bauwens, speaking of the *treatment of goitre with ergotin*, divides cases of goitre into the following classes: 1. Cystic goitre, with easily apparent fluctuation. 2. Goitre partly cystic and partly hypertrophic. 3. Goitre characterized by diffuse parenchymatous hypertrophy and great vascularity. 4. Recent goitre, soft and diffuse. In cystic goitre, and in soft, diffuse, recent goitre, the author considers that iodine is the best remedy, and has most confidence in parenchymatous injection as the mode of its employment. He calls attention to the fact, however, that in proportion as vascularity predominates as a cause of thyroid enlargement, so will iodine fail to cause reduction. Iodine stimulates the reabsorption of the contents of the cysts, but cannot cause the vascularity to diminish. It is in these latter cases that the author recommends ergotin. The ergotin should be injected into the

substance of the tumour; it at once causes contraction of the muscular coats of the small arteries, and a diminution in the size of the tumour and in the amount of pulsation observed is at once apparent. He uses the following solution: R. Yvon's ergotin, 1 gramme (gr. xv); glycerine, water, in equal parts, enough to make 7 grammes (3 j3/4). Of this solution he injects 2 grammes (3ss.) at a time directly into the substance of the goitre; this treatment is repeated at intervals of about two weeks until a cure is effected. It may not be out of place to mention that the ergotin of Yvon does not differ in any essential from that of Bonjean and other makers. The author reports the following case: A woman of twenty-nine has suffered from goitre since the age of fourteen. Moderate in size for seven or eight years, the tumour has lately begun to enlarge quite rapidly; at the time of examination it measured three inches transversely, by two and a half vertically, the right lobe predominating. It was elastic to the touch, pulsated, and presented a slightly marked soufflé. At the menstrual epoch, upon excitement, or as a result of singing, shouting, or hard work, the tumour became more enlarged, and pulsated vigorously. The signs were those of a goitre, essentially hypertrophic, with predominance of the vascular element. At times there were attacks characterized by dyspnoea, buzzing in the ears, dizziness, and dimness of vision. Twice the patient had suffered from attacks of complete aphonia lasting two or three weeks. Iodine had been tried in various forms and ways, but without any good result. Parenchymatous injections of ergotin, as described above, were practiced for five weeks, every six or seven days; at the end of that time the tumour had completely disappeared. There was at no time any considerable soreness or pain as a result of the injections. A little swelling, with some sensitiveness at the point of injection, lasting only about forty-eight hours, was the only trouble occasioned. The author suggests the treatment in exophthalmic goitre, although he has not yet had an opportunity to try it.—*Concours Medical—Lancet and Clinic.*

TREPHING IN IDIOPATHIC ABSCESS OF THE BRAIN.—The patient, aged forty-five years, had suffered since his thirty-seventh year of phthisis, with repeated attacks of hæmoptysis; from this he apparently recovered completely. In March, 1881, he suffered from severe migraine of the left side, the pain being most marked in the frontal and occipital regions. The seeing of sparks and flashes, by which the patient had been troubled, was substituted by a cloud which appeared before his eyes. In walking he would strike against objects approaching from the right side, and an ophthalmoscopic investigation revealed that the right squints of both fields of vision were insensible to light. Gradual emaciation of the patient; loss of appetite; oc-

casual attacks of fever with slight chills ; increasing debility. Tongue and facial muscles unaffected. Right arm and leg decidedly paretic ; the leg being more so than the upper extremity. Sensibility to pain retained in both. The paretic symptoms supervened four months after the ocular trouble.

From this last named symptom it seemed very probable that the abscess which was suspected, originated in the cortical portion of the cerebral hemispheres posteriorly, whence the disease extended forwards and in the course of time involved the motor centres. In its extension forward, the diseased process first came in contact with the motor centre for the lower extremities, and in this way the greater paresis of the lower limb can be easily explained. The facial and lingual centres being farthest removed, the parts supplied from them remained unaffected.

Since there could be no doubt as to the nature and bent of the lesion, the indication for trephining was directed. *Ubi pus evacua!* It was the only chance for saving the life of the patient. The operation was practiced while the patient was fully narcotized with chloroform. The hair having been removed from the left side of the scalp. An incision was made six cen. in length, beginning three cen. below the superior posterior angle of the parietal bone, and continued towards the anterior and inferior angle. Upon this a second incision was made at a right angle. A button of bone having been removed, the exposed dura mater looked distended ; no pulsation perceptible. When the dura mater was opened, no pus was visible. The cortical substance appeared softer than usual and was cedematous. About 4 cen. beneath the surface a somewhat resisting mass could be felt. Into this a canula was introduced and vent given to a drop of pus. A deep incision was then made into this part and three teaspoonfuls of rather thick pus escaped. The pulse at once improved and pulsations of the brain became manifest. The abscess cavity was washed out with a pulverized solution and a thin drainage tube inserted into it. During the first six days after the operation a decided improvement was visible in the condition of the patient. The patient's condition was ameliorated, respiration freer and sensorium clearer. On the evening of the sixth day a chill supervened, from which time the patient declined rapidly, and died on the fourteenth day after the operation.

The post-mortem examination revealed a tubercular abscess of the posterior portion of the left parietal and occipital lobe of the brain. Recent spontaneous perforations into the left lateral ventricle. A few small tubercular masses were detected in the vicinity of the large abscess.—C. Wermicke and E. Halm, *Virch. Arch.*, Vol. 87.—*Cin. Lancet and Clinic.*

ADVERTISEMENTS.—There is no one subject in

regard to which the profession are so incorrectly informed, as they are in regard to the advertisements in a medical journal. As has been said by a friend, in correspondence, the great fault in relation to medical journals, as observed by himself, is, that as soon as a medical journal obtains a large subscription list, it immediately carries a large number of advertisements. And his observation is that which the great majority of physicians would make, if interrogated on this subject.

Now the fact is that no greater blunder could possibly be made, and it is well to correct it.

If a publisher *decreased* the number of text pages of a journal, as he *increased* the number of advertising pages, such a course would be dishonorable ; it would be unjust to the subscriber, and would render a journal unworthy of support. But if he increases the number of advertising pages, and does not lessen the amount of reading matter, such a course should be most welcome to every reader, for it is an evidence that the journal is a success ; that it is on a sure basis ; that advertisers select it on account of its offering a large circulation to themselves, and that their money is safely and judiciously invested. But, more than all, a large advertising business largely increases the revenue of a journal, enabling it to offer increased advantages and attractions to its subscribers.

It is on account of its large advertising business that the *New York Herald* is constantly increasing the quantity and improving the quality of its reading matter ; that its editorial corps is strong ; that its contributors and correspondents furnish interesting facts from all parts of the world. Cut off its advertising department and the *Herald* could not pay expenses.

The same reasoning is true in regard to the *London Lancet*, the largest and best medical journal in the world. In its present form it carries 32 pages of reading matter, and 48 of advertisements ! the largest proportion of advertisements of any medical journal published. Here advertisers seek a large, good, and well distributed journal. In turn they pay to it a large revenue, and this revenue is largely spent in securing for its readers the best medical matter to be obtained. Without this advertising support, the *London Lancet* could not possibly offer to its readers more than a mere fraction of the great advantages which they at present enjoy. In fact, the abrogation of its advertising department would so change the quantity and quality of the reading matter, that its best friends would no longer know the *Lancet* ; would reject it and forsake it.

There is, then, no greater blunder than to object to a journal on account of its large advertising department : *the size of this department is the key to a journal's success and the index of its prosperity.*—*Gaillard's Med. Journal.*

THE SURGERY OF THE URINARY ORGANS.—The recent advances in the surgical treatment of diseases of the urinary organs are the most interesting topics of discussion at the medical societies of London at the present time. Last week, at the Medical and Chirurgical Society, Sir Henry Thompson described a case of pedunculated fibroma of the bladder, which he had successfully treated by removal through a perineal incision. The patient was originally under treatment for calculus, and was submitted to lithotrity more than once, but the symptoms were not completely removed; and then, on careful exploration of the bladder, the tumor was grasped, though, as it was coated with a phosphatic deposit, it was mistaken for a sacculated stone. Sir Henry Thompson opened up the membranous portion of the urethra from the middle line, and then, after detecting the true nature of the case, removed the growth by twisting it off with a pair of forceps; there was no bleeding to speak of, and the man made an uninterrupted recovery. Sir Henry strongly urged that where it is necessary to open the bladder for diseases other than stone, it is better to open the membranous urethra in the middle line, than to do either the "lateral" or suprapubic operation; he insisted that the bladder could be efficiently drained and explored through this incision, that most tumors of removable size could be removed through it, and that it was a far simpler and safer procedure than either of the others. In the subsequent discussion many speakers joined issue with him on this point; Mr. Bryant, Prof. Marshall, and Mr. R. Harrison, for instance, preferring the lateral incision. But, of course, the chief point raised in the discussion was the diagnosis of the tumors which are capable of this treatment, from those which are not. The most reliable points in favour of the former being youth and the absence of induration on rectal or vaginal examination. Sir Henry Thompson's case will probably be of great service in drawing marked attention to the subject, and especially in encouraging surgeons in exploring the bladder through a perineal urethral wound, which, he says, can be done so easily and so efficiently. As this operation is practically free from danger, it will probably be used as an aid to diagnosis as much as for treatment.

Three meetings during the present session of the Clinical Society of London, over which Mr. Lister presides, have been devoted to the subject of operations upon the kidney. Nephro-lithotomy, or excision through the loin of a stone from the kidney, has been shown to be a very successful operation if the stone be small, as these calculi often are, and the renal tissue healthy. Mr. Battin and Mr. Beck related such cases, but Mr. Godbe contributed a case in which the kidney was greatly enlarged, sacculated, and each sacculus was filled with a good-sized stone; here excision of the whole

organ was attempted, but the patient died. Nephrotomy, or exploration of the kidney, with or without incision into it, has also proved very useful on many occasions. The operation itself appears to be very free from danger, and in most cases the kidney has been easily exposed. When stone is suspected, a long needle set in a handle, devised by Mr. Barker, is used to puncture the organ in various directions until grating is felt. The incision and drainage of strumous and suppurating kidneys appears to be capable of affording great relief, but as yet has not proved absolutely curative; and at this point a divergence of opinion comes in, some maintaining that in such cases it is better to excise the kidney at once, and others that it affords a better chance to drain the kidney first, and then, when the patient has recovered a certain amount of strength, to do the more severe operation. Further experience is wanted to decide this point; the objection to postponing the excision is that the first operation leads to great induration around the kidney, and increases the difficulty of subsequent nephrectomy.

Nephrectomy, or excision of the kidney, is a very severe operation, and we have just had a series of three fatal cases presented at the Clinical Society; in one the death was from total suppression of the urine, and in the two others a dose of morphia, administered soon after the operation, is shrewdly suspected of having, at any rate, accelerated death. The special point on which there is a good deal of doubt here is, whether it is better to remove the kidney through the loin or through the belly. If the organ is very large, it cannot be excised by a lumbar incision, and it appears probable that the abdominal incision will be found to be the best in all cases. We are not so fearful of opening the peritoneal cavity as we used to be, and the removal of the organ can be proceeded with, with so much more exactness and ease from the front than from behind. The best abdominal incision seems to be one made in the linea semilunaris. The small intestines are to be well drawn aside, and the peritoneum cut on the outer side of the colon, and that viscus turned in. If, now, the cut edges of this layer of peritoneum are at once united to the edges of the wound, the operation in its further stages becomes extra-peritoneal.—*Cor. Medical News*

ADDISON'S DISEASE.—At a meeting of the Pathological Society of London, held Tuesday, Dec. 20, 1881, reported in the London *Lancet*, Dr. Fenwick showed a specimen of Addison's disease of the supra-renal capsules, from a case without bronzing of the skin. The man was recently in the London hospital, under the care of Dr. S. Fenwick. He was a laborer who had had fair health. About four months previously he caught cold; a month afterwards his urine became high-colored and scald-

ing, and he was languid and suffered from vomiting. On admission he was very languid; the pulse was very feeble; there was no pigmentation of skin or the mucous membranes, and no signs of visceral disease; there was tenderness over the epigastrium. Addison's disease was diagnosed. On September 28th, on attempting to get out of bed, he fainted, and soon after died. At the autopsy the organs generally were healthy. The liver was enlarged, and the left kidney was much larger than the right. Both supra-renal capsules were enlarged, hard, and nodulated; they were translucent, and in places yellow. He had collected all the cases of Addison's disease recorded in the Pathological Transactions during the last fifteen years, and found they were thirty in all, twenty-three males and seven females. The youngest age of males at death was five, the oldest fifty-five; the youngest age of females nineteen, and the oldest fifty-five. Average duration of illness in non-bronzed cases was 4.8 months, but in bronzed cases it was 26.8 months. If patients, without bronzing of the skin, died in one-fifth of the time of the others, the greater fatality was due to the constitutional disease, and the mischief causing this must be more intense. The two non-identical effects must have two different causes, or the same cause acting upon two different parts; the former idea might be certainly excluded. He thought the constitutional changes were due to degeneration of the medullary part of the supra-renal capsule, while the pigmentation was due to a chemical change in the blood resulting from the degeneration of the cortex of the capsule. The skin was well bronzed in nineteen cases, slightly or not at all in eleven. In four out of these eleven cases only one capsule was affected, and more often the right. In the case shown to-night, the disease clearly mapped out the medulla. Dr. Wilks said that Addison had known that in the early stage the bronzing was less marked, and thought that some cases died before bronzing occurred.—*Med. and Surg. Reporter*.

DIFFERENTIAL DIAGNOSIS OF ABDOMINAL TUMORS.—Dr. Erich, of Baltimore, contributes a very instructive paper to the Clinical Society of Maryland, wherein he points out how easily we may make very singular errors of diagnosis in abdominal tumors. He illustrates his views by the narration of several cases, hoping, apparently, to add to the "known sources of error" in arriving at a good diagnosis. In Case 1, a first examination per vaginam "revealed an irregular, hard, nodular tumor in the left iliac region somewhat posteriorly," and a diagnosis of probable cancer was ventured. A year and a half after this examination the patient was examined jointly by Dr. Erich and Dr. Chadwick, of Boston, when the conditions noted, had entirely changed. The tumor then noted, had disappeared, "and a firm, round, moveable tumor,

about the size of an adult head, was found occupying the hypogastric region." Present diagnosis—a fibroid. It was decided to remove the supposed fibroid by laparotomy. Upon making an incision and bringing the tumor in view, an exploratory puncture was made which yielded pure pus. The patient died, and a post-mortem revealed an abscess. This case teaches that fluctuation can not always be made out, even when a large amount of fluid is present. "I was compelled to acknowledge an error of omission," says Dr. E., "in not making an exploratory puncture before resorting to laparotomy. I have since then determined never to pronounce an abdominal tumor solid until after aspiration." Case 2 had been pronounced by an eminent surgeon a solid uterine fibroid. All the conditions so indicated; but true to his determination, an aspirator needle was introduced by Dr. Erich, and to the surprise of himself, as well as others, "a pint of pure pus was withdrawn." In Case 3 the patient had been sent to Dr. E. by a friend who had made out "probable diagnosis of ovarian tumor." The examination made by Dr. Erich appeared to exclude pelvic cellulitis and abscess—the diagnosis of ovarian cyst was therefore provisionally endorsed, and preparations for an operation were made. Preparatory to this a tonic treatment was set up, and a mercurial purge administered. The purgative produced diarrhœa with profuse and offensive discharges. Fever was established. The tumor was speedily reduced one-half. Aspiration, now instituted, removed a quantity of offensive pus and gas. The tumor was evidently a pelvic abscess. In his concluding observations Dr. Erich remarks: "In view of these difficulties, which have been acknowledged by the best men in the profession as liable to occur to them, I think it advisable to use the aspirator in cases of doubtful abdominal tumor before pronouncing definitely upon its nature.—*Obstet. Gaz.*

SIMULTANEOUS TRACHELORRHAPHY AND PERINÆORRHAPHY.—Dr. James B. Hunter, Surgeon to the Woman's Hospital, gives, in the *New York Med. Jour. and Obstet. Review* for 1882, a number of cases of prolapsus uteri and of laceration of the cervix and perinæum, remarking that extraordinary cases are sure to be fully described, while those of every-day occurrence are often passed over as of little consequence. In the belief that the latter possess some interest and value to many readers, he proposes to present, from time to time, sketches of a few cases as they occur in his service. In regard to the performance of Emmet's operation for laceration of the cervix and the operation for lacerated perinæum, both at the same time, he states that several years ago he tried this method in a hospital patient, who could not remain long enough to have the operations done at the usual interval of two or three weeks. It succeeded so

well that he has since done the double operation frequently, both in hospital and private practice, and has never had occasion to regret it. If, however, the laceration of the cervix is very extensive, or any condition exists that renders hæmorrhage probable, he always does the operations separately. Sometimes, too, it is not desirable to keep the patient long under ether, in which case the operations should not be done at the same time. The disadvantages of the double operations are: that it is impossible to reach the cervix, if it should be necessary, without sacrificing the new perinæum; that the patient is longer under the influence of ether; and that the sutures can not be removed from the cervix so soon. The advantages are: that the patient takes ether only once, and that she and her friends are spared the preparation (always somewhat formidable in a private family) for two operations; that there is an economy in time, as she lies in bed no longer than if the operation on the perinæum alone had been done; that a delicate patient suffers less fatigue, and is less emaciated, than she would be after having gone through two separate operations. He usually removes the sutures from the perinæum on the eighth day, and those from the cervix two weeks later, though with care the latter may be safely taken out earlier; while, on the other hand, there is no objection to letting them remain a month if it is convenient to do so, as they cause no irritation or inconvenience if the twisted ends of the wire are properly bent over and out of the way. While, therefore, he does not recommend the double operation as a rule, he considers it entirely practicable in many cases, and often prefers to do it.

CYST OF THE BROAD LIGAMENT, COMPLICATING LABOR.—Dr. N. W. Webber, *Detroit Clinic*, reports the following case: During accouchment, progress was interrupted by what was supposed to be a fecal mass, but which, on more careful examination, proved to be a tumor. This being rapidly forced down between the head and the sacrum, finally took position before the foetal head. The attending physician then applied instruments, but could not deliver. While counsel was sent for, the funis came down, and could not be replaced; a calamity which resulted in the death of the child. Counsel having arrived, the forceps were again applied, and again without avail. At this time the tumor was about the size of a man's hand, and about twice as thick. Delivery was finally accomplished by recourse to craniotomy. The patient, after long and dangerous suffering from cystitis and inflammation of the soft parts, finally recovered, and was then informed by two other physicians that she had an ovarian tumor. One year after her confinement, she came under the care of Dr. Webber, who on examination, found a medium-sized tumor pressing well down into the posterior cul-de-sac, and

that moreover, she was four months advanced in pregnancy. From a careful bimanual examination he was led to doubt the correctness of the previous diagnosis. He therefore put the patient under ether, and with a large-sized aspirator needle, punctured the tumor, giving exit to six ounces of the clear limpid fluid peculiar to cysts of the broad ligament; besides this, several ounces were afterward lost by drainage. No outward symptoms followed, save a slight irritability of the uterus, which was quieted with opiates. At the proper time, she was taken in labor, and was delivered of a large and healthy boy. Nothing like a tumor could be discovered after careful examination. The cyst was undoubtedly the cause of all her trouble, and had it been punctured at first, craniotomy would have been unnecessary, and the cystitis and other trouble would not have occurred. —*Obstet. Gazette.*

PREVENTION OF LACERATION OF THE PERINÆUM.—At the meeting of the St. Louis Medical Society, May 7th, 1881, the proceedings of which appeared in the *St. Louis Medical and Surgical Journal* for August, Dr. G. Hurt read a paper on Position in Relation to Injuries of the Perinæum during Labour, in which he gives the history of several cases tending to prove that a sharply flexed and abducted position of the thighs, though convenient and necessary in some cases, is not conducive to the greatest degree of security to the maternal soft parts at the moment of the passage of the child's head through the vulva, nor to the speedy and safe delivery of the child. In the autumn of 1877, he attended a case in which the second stage of labour was somewhat tedious; and just as the head began to distend the perinæum, the patient, as a matter of choice, took the left side position, with her thighs and knees sharply flexed. The foetal head, which was unusually large, soon became impacted in the soft parts, uterine contraction became stronger and refused to intermit, the perinæum appeared to have reached the point of its utmost distention short of laceration, being pushed down so that the foetal occiput rose from under the pubes, and yet the head was so completely enveloped by the expanded perinæum, that a rupture of the latter seemed inevitable. At this moment, however, the patient perhaps involuntarily, extended her limb to a line nearly parallel with that of her body, and coincidently with this movement the foetal head passed through the vulva without any perceptible injury to the parts. The next case was that of a primipara, in which the foetal head became so tightly impacted at the vulva as to cause considerable delay, though the uterus was contracting with great force, and laceration seemed inevitable. The patient was on her back, with her knees sharply flexed and abducted. She was requested to straighten her left leg, and as she

did so, the vertex became more prominent, and the forehead slid over the perineum without causing even so much as an abrasion of the fourchette. In other similar cases, extending the thigh, when the passage of the child was impeded by a too rigid perineum, was followed by the same happy result. The perineum is not only relaxed by the extension of the limbs, but the degree of its inclination is increased so as to impose less resistance to the passage of the foetal head, and *vice versa*; in the ratio that the limbs are flexed and abducted, the perineum and contiguous parts are put upon the stretch, and consequently its resistance and liability to rupture proportionately increased.—*British Med. Journal*.

MULTIPLE CEREBRO-SPINAL SCLEROSIS.—On February 27th, Dr. Whittaker reported the following case before the Academy of Medicine, Cin. :—

A professional gentleman, about thirty-five years of age, otherwise in robust health, was attacked with tremors about two years ago. No cause could be assigned for them; the man had been of regular habits and gave no history of syphilis. Nothing more could be learned than that he had been attacked by robbers some years ago, and had received a blow on the head, but he recovered from it without any lesions. The tremors were first observed in his gait so as to excite the suspicion that he had been drinking. Gradually they invaded the upper extremities so that he was unable to write, then the head began to oscillate and finally the tremors became general—the whole period of the symptoms covering about one year from the first onset of the disease. The tremors occurred only after muscular efforts and then became uncontrollable. There was no defect of vision, no nystagmus.

On account of the rarity and importance in a diagnostic point of view, the speaker presented the patient to the class. When questions were put to him he answered by dividing his words into syllables—in a *scanning* measure. Some of the students recognized the case at once as one of multiple cerebro-spinal sclerosis, though one student quite naturally took it for chorea. The diagnosis is to be made between these two diseases and paralysis agitans, which is not very difficult. In sclerosis of the brain and cord the tremors are in the line of muscular action, while in chorea they are irregular and in every direction. In paralysis agitans the tremors are constant, while in sclerosis they occur only during muscular efforts. Moreover, paralysis agitans generally occurs late in life, between fifty and sixty, while sclerosis belongs to adult life, between twenty and forty. The cause as well as pathology is obscure. All we know is that sclerotic patches are found in the brain or cord, or both, varying in size from a pin's head to a dime or even a quarter of a dollar. The disease

depends on or is a chronic inflammation, but what induces it is not definitely known. An excuse for our want of more accurate knowledge of these conditions is the fact that this subject has been but recently studied, more particularly by the French and Germans. The prognosis as well as treatment is unfavourable. Nothing controls it except the constant current, chloride of barium, or nitrate of silver, and then the effect is only temporary.—*Cin. Lancet and Clinic*.

THE TREATMENT OF PNEUMONIA AT BELLEVUE HOSPITAL NEW YORK.—The motive of the general treatment of pneumonia at Bellevue Hospital is to sustain the powers and stimulate the functions of the patient till the comparatively brief and self-limited disease shall have spent itself.

The pulse is taken, rather than the temperature, as the gauge which best indicates the capacity for resistance, and an increase in its rapidity and diminution in its force are understood as a call for stimulants. The forms of stimulation used are to some extent subject to differences of opinion on the part of the visiting physicians, but all are agreed as to the value of whisky, and there is almost as much unanimity in their regard for the carbonate of ammonium. Digitalis is much used; but it is objected to by some, partly because experience seems to indicate that in some cases, when the crisis of the disease has passed, patients are left, after its use, in a condition less favorable for recovery, and partly from the theoretical consideration that this drug is not general enough in its action. Camphor has been employed by some as a diffusible stimulant.

The general treatment of pneumonia is then by simple stimulation. In special conditions, however, more is done. When the patient is first seen, if he is suffering from considerable pain, a few doses of morphia are recommended.

If the disease is seen at its outset, and if the outset is violent in character, one at least of the leading physicians on the visiting staff believes in the good effect of a few doses of aconite, but its use is not general in the hospital. The spirit of Mindererus, sweet spirits of nitre, calomel, and Dover's powder, are used by some in the first stage of the disease. Quinine is occasionally called upon to bring down the temperature when it rises to a serious height. One of the visiting physicians makes a special point of the importance of watching the kidneys and seeing they perform their duty well.

The appearance of œdema of the lungs finds all agreed upon the necessity of crowding the stimulants. But beyond this there are some differences of practice. They would be included in the use of dry cups, the hot pack, oxygen, and, in the few cases which are entirely suitable for it, bleeding.—*Medical Record*.

GUNSHOT WOUNDS OF THE VERTEBRÆ.—The exceedingly interesting paper on this subject, in this number, will be read with great interest and profit; more particularly, as such wounds are believed by the great majority, even of the well informed Profession, to be necessarily fatal. Such opinions have been so frequently expressed by physicians of prominence in medical and also in secular periodicals, in connection with the Garfield case, that every paper teaching a different and a truer lesson is to be appreciated.

In the thirty-two cases given in the History of the Crimean War, four recovered. In one hundred and ninety-one cases occurring in the French service thirteen recovered. In one hundred and eighty-seven cases reported by Confederate Surgeons, seven recovered. In one hundred and forty-nine Lumbar-vertebral cases reported in the "History of the Rebellion," fifty-one were discharged, and twenty-eight returned to duty; a mortality not absolute, but of 45.5 per cent. In sixteen reported cases of removal of the ball, only five died and seven recovered.

When such facts are considered, the report of the cure in this number becomes, in comparison, less astonishing, but the facts entire serve to increase the surprise which the unfortunate statements made in regard to Mr. Garfield's "inevitable death" have so extensively and injuriously created.

Gunshot wounds of the lumbar vertebræ are of course very serious, but when in 149 cases 79 have recovered, and when in 16 cases of operation, 7 have recovered, the late teachings on this subject are very far indeed from the truth. They are not only unjust, but libellous to Surgery.—*Am. Med. Weekly, Feb. 25, 1882.*

ACONITE *vs.* SALICYLIC ACID IN THE TREATMENT OF RHEUMATISM.—Aconite has been very highly recommended in the treatment of rheumatism. I have given it in this disease with great advantage; and Dr. Murrell in his exhaustive letter on aconite, or aconitia, in the *Journal* of April 15th, states that Gubler commends it highly for the relief of acute rheumatism and gout. I will briefly detail a case, at present under my care, where aconite had a fair trial and failed, and in which the value of salicylic acid was immediate, pronounced, and general. A woman, aged 26, was admitted under my care at the North West London Hospital, suffering from rheumatism of three weeks' duration; the temperature was 101° to 102°. The disease was complicated with nausea and symptoms of pericarditis, as well as with pains in the shafts of the long bones and erythematous eruption on the legs. On admission she was treated by the house-physician with a mixture the main ingredient of which was potassium iodide. This she took for several days, without any perceptible effect, till I

put her on a mixture containing 2 minims of tincture of aconite, in combination with a little digitalis and 15 grains of bicarbonate of potash, to be taken every three hours for twelve doses. It slightly lowered the temperature after the first day only, caused a copious perspiration, but was attended with no beneficial effect, either as regards the pains, the palpitation, or the fever. This mixture, with one minim of the tincture of aconite, was continued for nine days, but with no other effect. I then gave 15 grains of salicylate of soda, in water, with the result that in three days the temperature was normal, the pain had disappeared, and the heart-symptoms greatly relieved. This confirms to some extent the statement of Dr. MacLagan that salicylic acid is not injurious to the integrity of that organ; and that, in cases when it appears to be so, the damage to the heart occurs in the natural and erratic course of the disease, often even before its manifestations in the joints become apparent.—*DR. CULLIMORE in Brit. Med. Journal.*

SYPHILIS TRANSMITTED TO THE THIRD GENERATION.—Mr. Jonathan Hutchinson (*Reynolds' System of Medicine*, Vol. 1, p. 431.) gives the following.—"A respectable young woman came to me about six months ago, on account of an inflamed eye. She had interstitial keratitis in a typical form, her teeth were notched, and her physiognomy characteristic. She told me she was suckling her first child, an infant of two months. I inquired if it were healthy. She said it was a fine baby and ailed nothing whatever. I asked her to bring it with her at her next visit. She did so, and on having it stripped, I found it covered with coppery blotches, with condylomata at the anus and snuffles at the nose. In subsequent treatments by mercury all these symptoms disappeared. There remains of course the source of fallacy that this child's parents, one or other of them, may have acquired syphilis. As to its father, I may state that he has long been under my treatment for sycosis, and that I have made the most detailed inquiry of him as to any venereal disease. I believe strongly that he has never had any. A fact which is perhaps of more value than his own statement, is that his sycosis has not been benefitted in the least degree by the iodide of potassium. Of course I have not ventured to insult him by inquiring into his wife's antecedents; but there is no reason to entertain suspicion in that quarter, while the fact that she is the subject of inherited disease makes it probable that she would not be liable to the acquired disease. Having, therefore, carefully balanced the evidence, I incline to believe that in this we have an instance of the transmission of syphilis to the third generation."

DEATH AFTER OVARIOTOMY DUE TO PREVIOUS TAPPING.—Mr. Lawson Tait drew attention to the

fact that amongst the last 100 ovariectomies (for cystoma) which he had performed, there had been only three deaths. In all, the deaths had been due to the formation of a firm white clot, which started from the point of ligature of the pedicle and slowly traversed the venous system until it reached the heart, death ensuing in from 30 to 40 hours after operation. The symptoms which preceded death were swelling of the legs, rapid rise of pulse and its disappearance from the extremities some time before death; breathlessness, ending in suffocation and slight delirium. He had seen several such deaths, but not one in a patient who had not been previously tapped. His explanation was that the repeated tapplings deprived the blood of some element or elements included in the infinite variety of albuminous substances found in ovarian cysts, the deficiency of which predisposed to coagulation of the blood. The author thought that no case of ovarian tumor should be tapped till previous abdominal section had shown that it could not be removed. He believed if this rule was followed the mortality might be reduced to less than one per cent., if cases were operated on early; as long as the clamp gave a mortality of 25 per cent. it was right to stave off by all possible means so fatal an operation as ovariectomy.—*Midland Medical Society—Lancet*, Feb. 18.

TREATMENT OF COMEDONES—The black points, fleshworms or comedones, which are found in the face, and especially near the nostrils, are not at all produced by the accumulation of the particles of dirt or dust, as has generally been believed, but by pigmentary matter which is soluble in acids. It is known, in fact, that black comedones which accompany acne often appear not only on persons exposed to dust or rather careless of their person, but also on chlorotic young girls who live in good circumstances. Besides, observation shows that the discoloration not only exists on the surface of old comedones, but descends always to the lower parts. Accepting this fact, Dr. Unna, of Hamburg, has used, successfully, acids in the treatment of comedones. He generally prescribes:

R—Kaolin,	4 parts.
Glycerine,	3 parts.
Acetic acid,	2 parts.

With or without the addition of a small quantity of some ethereal oil. With this pomade he covers the parts affected in the evening, and if need be, during the day. After several days all the comedones can be easily expressed, most of them even come out by washing the parts with pumice-stone soap. The same results can be obtained by bandaging the parts affected for a long time with vinegar, lemon juice or diluted hydrochloric acid. The author concludes by saying that the acids act like cosmetics, as they transform the black color into a brown and yellow shade, and destroy it gradually

altogether; they produce a quicker desquamation of the horny bed which interrupts the exit of the comedones and brings to the surface the glandular openings.—*Cin. Med. News*.

THERAPEUTICAL INDICATIONS FOR ERGOT.—Dr. E. Evetzky, (*New York Medical Journal*) sums up his views regarding the action of this drug, as follows:—

First: Disorders of the circulation and diseases of the organs of circulation. Second: Paretic conditions of the organs composed of organic muscular tissue, the circulatory system excepted. Third: Inflammatory and other morbid enlargements and growths. Fourth: Abnormal secretions. Fifth: Symptoms referable to the nervous system, and depending chiefly upon circulatory disorders within it. In regard to contra-indications to the use of ergot, it should be used with extreme caution in patients with an enfeebled heart. Pregnancy is not an absolute contra-indication. The use of the drug should be suspended during menstruation, unless it is given for some special condition of that function. To avoid disturbing the digestion it is best to give the drug by the rectum or hypodermically.

IODOFORM FOR SOFT CHANCRES.—In the *British Medical Journal*, Dr. Walter Whitehead says that iodoform appears to be one of the most efficacious drugs in the treatment of the syphilitic non-infecting soft sore, when not unduly inflamed. It has, however, the unfortunate counterbalancing disadvantage of attaching to the patient the liability of unenviable suspicion, the public having become keenly alive to its distinctive and penetrating odor, and having also acquired an appreciative knowledge of the principal purpose for which the drug is most frequently used. He has succeeded, he thinks, in obviating this objectionable feature, without, apparently, sacrificing any of the therapeutic advantages of the drug, by using it in the following manner: He first very carefully cleanses and dries the sores, by means of little pledgets of bibulous paper, and then, by means of a camel's hair pencil, applies freely over the surface of the sores a solution of iodoform in ether. The ether rapidly evaporates, and leaves the iodoform uniformly spread in an impalpable powder over the sores. To insure a free application, the latter part of the process may be repeated and allowed to dry. When perfectly dry, each sore is given a coating of collodion, which is allowed to overlap, about a quarter of an inch, the area of each sore. Before the collodion has had time to dry, a pinch of absorbent cotton wool is placed on each patch, as a protection against the rough contact of clothing. This dressing is a low to remain undisturbed for twenty-four hours, when the firm film which forms may be gently removed and a fresh coating applied.

This treatment is continued day by day until all the sores have quite healed. He has found that a piece of gold beater's skin may be substituted for the collodion after the application of the iodoform. This process will suppress the odor, while a further advantage will be gained in the protection afforded by the collodion against auto-inoculation, and also against the risk of contagion from others coming in contact with the sores.—*Med. and Surg. Reporter*.

THYMOL IN DIPHTHERIA.—Dr. Warren (*Le Progrès Méd.*) has employed the following formula with much success in diphtheria:—

Glycerin.....	70 parts ;
Chlorate of potash.....	10 parts ;
Brandy.....	250 parts ;
Sulphate of quinine.....	2 to 4 parts ;
Thymol.....	30 to 50 parts.

A dessertspoonful of this mixture may be given hourly or every two hours to children of two to five years of age. For older children the dose may be increased to a tablespoonful. It should be given as far as possible without the addition of water, as it then produces an excitant or even irritant action on the buccal mucous membrane. It may also be employed as a prophylactic remedy against diphtheria and malaria. It has also been used as a tonic with much success in cases of typhoid fever with diarrhoea, but in this condition a few drops of the tincture of iron should be added to each dose.—*London Practitioner*.

OPERATION IN CASES OF DISEASED JOINTS IN PHTHISICAL SUBJECTS.—Mr. Henry Smith, in a letter to the *Lancet* (November 12, 1881), confirms the views of Mr. Bryant, who has already spoken upon the above subject. Mr. Bryant does not think that an operation for the removal of a diseased joint in a phthisical patient is unwise, where the local disease is of such a nature as to prevent the recovery from the systemic disease. But apparently in such cases he confines his operations to amputation, while Mr. Smith does not hesitate to perform excision. The latter gentleman states that great benefit has resulted from excision in cases which he has observed. He mentions as an instance, a tailor, suffering from tubercular phthisis and extensive disease of the elbow-joint, who, after operation, was greatly benefitted as regards the phthisis and the joint disease. He also says that there are instances of lardaceous disease of the liver, where this condition will disappear after operation upon the hip-joint.—*N. Y. Med. Record*.

The *N. Y. Medical Times* has been added to our exchange list. It is devoted to the elucidation and support of the principles of *similia similibus curantur* in medicine, although it requires a

somewhat careful examination of its contents to detect this fact. It has this to say regarding the use of the term "homœopath": "The display of the title 'Homœopath' upon signs is rarely met with in these parts, and its use, we will admit, is only for purposes of notoriety and should be abandoned by such as have any degree of appreciation of good taste and of the dignity of that title which needs no modification, viz., Dr. of Medicine." And yet there are those who will refuse to recognize a man who can utter such a sentiment, as a physician! We cordially welcome the *Times* to our table. It is withal a first-class journal....*Mich. Med. News*.

TORSION OF ARTERIES.—At Guy's Hospital, the London correspondent of the *Boston Medical and Surgical Journal* says that all the surgeons use torsion to the exclusion of the ligature, except in very small vessels where it is difficult to isolate the vessels from muscular fibres. They give a very large statistical showing in its favour. He has seen every kind of amputation there except of the hip-joint, and never a ligature applied except to a large vessel. They use no transverse forceps, but seizing the cut end of the vessel with strong forceps, twist it till it is felt to "give way," that is, the two inner coats break. He has often seen six and sometimes ten complete turns given to the femoral artery. Mr. Bryant said: "Doctor, theoretically the twisted end ought to slough off, but practically it never does. We have to talk to our students about secondary hemorrhage, but we do not show it to them." Mr. Lucas told him that for a long time they have ceased to dread, or look for secondary hemorrhage.—*Chicago Med. Review*.

TREATMENT OF OBSTINATE CONSTIPATION BY EXTRACT OF CALABAR BEAN.—Calabar bean administered to an animal produces tetanic spasms of the muscular tissues of the bowel, resulting in expulsion of the intestinal contents per anum. This fact suggested to Dr. Schæfer the idea that the drug might prove useful in obstinate constipation, due to atony of the muscular coats of the intestine, such as is often observed in women and in old men. The results of this mode of treatment are reported as satisfactory. The following is the formula of the preparation employed:—

Extract of Calar bean.....	0.05 gramme.
Glycerine.....	10 grammes.

Six drops to be taken every three hours during the day. Under this treatment constipation has been overcome within twenty-four hours.—(*Bert. Klin. Wochenschr.*) *Journal de Thérap.* 10th February, 1882.

GASTRIC RESECTION.—Billroth did not perform his prospected gastric resection in Bordeaux, as the patient died upon the day of his arrival. The

autopsy revealed an error in diagnosis, the stomach being found perfectly normal, while the gall-bladder was filled with calculi.

For the journey, Billroth received 12,000 florins, while 3,000 florins were apportioned to each of his assistants, Drs. Wolfler and Gersnay.

A slight idea of the enormous quantity of operative surgery Billroth performs, can be formed from a recent Sunday forenoon's labour. In that space of time, he removed two ovarian tumors and extirpated two uteri. The four patients survived the operations. His usual daily operation duty at the "Allegemeine Krankenhaus" is two and one-half hours.—*Cor. Med. News.*

A SEDATIVE EMMENAGOGUE.—For a day or two antecedent to the actual commencement of the catamenial flux, not infrequently women suffer acute pain in the pelvic region, doubtless due to hyperæmia and hyperæsthesia of the reproductive belongings. To obviate this I have found no treatment give such satisfactory results as the following :

R—Codeiæ sulphatis,	gr. j.
Chloral hydratis,	
Ammonii bromidi,	aa gr. xx.
Aquæ camphoræ,	ʒj.—M.

Sig.—The above dose to be taken at bed-time.

A repetition of the dose at *that* period is rarely necessary. In some cases a warm sitz-bath of fifteen minutes' duration before retiring, is a valuable adjuvant.—*Western Med. Rep.*, March, 1882.

DOCTORS IN CANADIAN LEGISLATURES.—In contrast to England, where not a single constituency is represented by a member of the profession, Canada appears to have an unusual number of medical politicians. In the Dominion Parliament there are, in the Senate, 6; in the House of Commons, 16; of these, one, Dr. Blanchet, is Speaker of the House, and Sir Charles Tupper (M.D., Edin.) is Minister of Railways. In the Provincial Legislatures, Nova Scotia has 3; New Brunswick, 2; Manitoba, 2; Ontario, 10; and Quebec, 10. In the last-named province, the Lieutenant-Governor is Dr. Louis Robitaille, and the Minister of Agriculture, Dr. Ross.—*Med. News.*

RESIGNATION OF PROF. GROSS.—On the 27th ult., Prof. Samuel D. Gross tendered to the Trustees of the Jefferson Medical College his resignation of the professorship of surgery which he has held in that institution for twenty-six years. Dr. Gross is seventy-seven years of age, and, although still in the enjoyment of vigorous health, recognizes the wisdom of lightening his labors with advancing years. Dr. Gross's world-wide reputation as a surgeon, and popularity as a lecturer, have justly attracted large numbers of students to Jefferson School, and his resignation is a serious

loss to the Faculty and to medical education in Philadelphia.—*Med. News.*

TURPENTINE AND CARBOLIC ACID IN TYPHOID.—Dr. J. F. Peace (*Med. Brief*) reports fifty-four cases of typhoid fever, of which 30 were treated with carbolic acid, given in one to three drop doses, three to four times per diem; and twenty-four were treated with turpentine, given in five to ten drop doses, three to four times a day. The duration of the disease was shortest in those treated with carbolic acid, and they all recovered. Of those treated with turpentine two died. The supporting treatment was the same in all.—*Chicago Med. Review.*

BLADDERS OF ICE IN MAMMARY ABSCESS.—Dr. Hiram Corson (*Am. Jour. Obstet.*) speaks in high praise of applications of ice in bladders to inflamed mammæ to prevent abscess, or even if abscesses have formed, to limit the destructive process. He has followed this practice for twenty-seven years, and in no instance, if suppuration has not already taken place, has he failed to disperse the inflammation at the same time that he brought comfort to the patient.—*Pac. Med. & Surg. Jour.*

ACUTE BRONCHITIS:

R—Vini Ipecac.....	ʒij
Potassii Citratis.....	ʒiv
Tr. Opii Camph.....	
Syrup Acaciæ	aa ʒj

M. Sig.—Tablespoonful thrice daily in the first stages of ordinary acute bronchitis.—*Dr. Da Costa.*

HOW LAWYERS ARE SOMETIMES MADE.—The *Alienist and Neurologist* cites from Prichard the well known case of the three congenitally idiotic brethren; one of whom received a blow on the head which brightened him up a little and he became a lawyer. The trouble is, some congenital idiots become lawyers without getting a blow on the head to brighten them up.—*Chicago Med. Review.*

THE LEGAL POSITION OF A PROFESSOR in a college, according to a recent decision of the Supreme Court of Pennsylvania, is merely that of an employee. He can be summarily dismissed at any time, therefore, by the corporation owning the college.—*Philadelphia Medical Times.*

EPILEPSY.—Dr. Allen McLane Hamilton's prescription for epilepsy :

R. Strychniæ sulph.,	gr. j. ;	fl. ext. ergotæ,	ʒ ss. ;
liq. potass. arsenat.,	ʒ ij ;	sodii bromid.,	ʒ ss. ;
digitalis,	ʒ iij. ;	aquæ menth. pip. ad.,	ʒ iv. M.

Sig.—A teaspoonful, before eating, in a half tumblerful of water.

EMPYEMA—FREE INCISION V. ASPIRATION.—A correspondent of the *British Med. Journal* reports the following case:—James W., aged seven years, was seized with a pleuro-pneumonia, from which he apparently recovered and began to run about. Twenty days after he had been last seen his father came (he lived about five miles in the country), and complained of the boy's breathing becoming more and more embarrassed. The little patient was again seen, and dulness had returned to the left side, the side originally affected, and breathing was more hurried. He was blistered and put on diuretics, but still the symptoms of compressed lung increased, and no doubt was entertained but that he was suffering from empyema; and on September 3rd his breathing was forty-five to fifty per minute; pulse so quick that it could not be counted; complexion livid. Thirty-five ounces of pus were drawn off by means of the aspirator, with of course immediate relief to the patient. For two days the little patient improved, but diarrhoea, a distressing symptom from the first, still continued. After this, however, he became more restless toward evening, and dulness increased, so that on the seventh day after, the operation had to be repeated, and with a result differing from the former only in the quantity (thirty ounces) of pus withdrawn. In thirty-five days the operation was repeated five times, and nearly two hundred ounces were taken from the cavity. After each operation the patient experienced great relief, and improved, though so slowly that it was deemed advisable to make a free incision. This was done between the fourth and fifth ribs, about one inch and a half posterior to the mid-axillary line, and a drainage-tube inserted. The child improved every day after this operation; and a very notable feature in the case, the diarrhoea, which had hitherto baffled every attempt to arrest it, ceased.

The wound in the chest-wall soon healed, and when last seen, with the exception of the left side of the chest being flat, the boy looked and felt well.

No antiseptics were used, so that the admission of fresh air into the pleural cavity is not so much to be dreaded as pent-up matter.

TREATMENT OF PERTUSSIS.—Dr. Forchheimer (*American Journal of Obstetrics*, January, 1882) has adopted Letzerich's treatment of pertussis with insufflations of quinine, using one gramme of quinine and half a gramme each of pulverized acacia and soda bicarbonate, divided into ten powders; one powder is blown into the throat twice daily. He claims, after a very logical and critical examination of his results, embracing the treatment of ninety-two cases, as compared with those of other authorities, that his method corresponds to an ideal one in the following particulars:—First: A positive effect is produced on the duration of the dis-

ease. Second: A positive effect is produced upon both the number and intensity of the paroxysms. Third: Complications and sequelæ are diminished. Fourth: Mortality is very much reduced. Fifth: Its prophylactic action must as yet be considered doubtful, yet the treatment requires more thorough testing.—*Chicago Med. Review*.

PERSONS WHO USE FURS AND FOOD preserved in tin cans have been found to suffer eventually from gastric trouble. This, it is asserted, is due to stannous compounds which are extremely irritant. Mr. Edison is reported (*Science*) to have invented a method of preserving articles of food in glass vessels from which the air has been exhausted and a high vacuum produced. The glass vessel is then hermetically closed by sealing off the channel to the air-pump, the envelope produced being essentially a homogeneous piece of glass. This invention appears to meet the difficulty experienced in the use of tin cans.

CLASSIFICATION OF MEN.—Hesiod said that in his day there were three kinds of men—those who understand things of themselves, those who understand things when they are explained to them, and those who neither understand things of themselves nor when they are explained to them. That was the classification in Greece over two thousand years ago, but it is a convenient one for use even now; and when a man has settled for himself to which class he belongs, his education has taken a long stride.—*Billings*.

Another successful gastrotomy was recently performed by Prof. Albert, of Vienna, upon a boy, aged eleven, who suffered from stricture of the œsophagus brought on by swallowing caustic potash. The case was exhibited before the Society of Physicians in Vienna.

BASHAM'S MIXTURE IN ALBUMINURIA.—This old-fashioned formula still holds a prominent place in the treatment of renal disorders. Its composition is as follows:—Tr. ferri. chlor. \mathfrak{zss} .; acid acetic dil. \mathfrak{zj} .; liq. amm. acet. \mathfrak{zivss} . tr. aurant. cort. \mathfrak{ziss} .; glycerinæ \mathfrak{zss} .—M. Sig. A tablespoonful, largely diluted three times a day.

FATTY HEART IN DIPHTHERIA.—Prof. Leyden, President of the Berlin Medical Society, thinks that there is a fatty degeneration of the muscular fibres of the heart, with abundant cell-proliferation, in diphtheria.

PURPURA.—R. Vin. ferri., \mathfrak{z} iv.; liq. arsenicalis min. xx.; syr. zingiberis, \mathfrak{z} ij.

M. Sig., one-sixth part, with three tablespoonfuls of water three times a day, after meals.—*Med. Gazette*.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Batelière, Paris.

TORONTO, JUNE, 1882.

This Journal has the largest circulation of any Medical Journal Canada.

CHAIRMAN ONTARIO BOARD OF HEALTH.

Our contemporary "the organ of the Toronto School of Medicine," with its usual one-sidedness comes forward in the last issue with a long bill of indictment against the editor of the LANCET, for daring to exercise his undoubted right of criticizing the qualifications of the Chairman of the Ontario Board of Health. The recently appointed Chairman of the Board is a colleague, and therefore must be defended at all hazards; for is not the existence of the "organ" for the benefit of the School and those connected therewith? Nor do we find any fault with the "organ" for so doing, but when, in order to defend a colleague, the editors so far forget what is due to themselves and the School they endeavour so faithfully to bolster up, as to make statements which they knew to be incorrect, impute unworthy motives, and retail "street gossip," it is incumbent on us to speak out more freely on the subject. Through the thin mask of the *nom de plume*, "Junius," the editors make statements which they were no doubt ashamed to make more openly. They knew, or ought to have known before publishing such a statement, that the "editor of the LANCET" was not an applicant for the Chairmanship of the Board of Health. That public gossip had mentioned our name, as well as the names of several other gentlemen in this city, in connection with the Chairmanship of the Board, and that a very warm and influential friend in the House pressed us to apply for the position, we do not pretend to deny; but that we

made application for the position, or were disappointed in not getting it, is utterly and absolutely without foundation. We have neither the leisure nor the inclination, to engage in any more work than we have on hand at present. There was not, therefore, any rivalry between us, nor do we consider him a rival in any sense.

Having thus disposed of that portion of the indictment in regard to our criticism, we will now state, in answer to the challenge of the "organ," the grounds upon which we were opposed to his appointment. We stated in the article which gave such mortal offence to the "organ," that while we did not approve of the selection of the chairman, believing him not to be a thoroughly practical man, we were desirous of giving him a fair trial. This was "the head and front of our offending, nothing more." We still think, that in the interest of the public and the profession, it would not have been prudent to say more; but his injudicious friends seem to think otherwise. The "organ" states that the chairman needs no defence among his professional brethren in Toronto. We venture to state, on the contrary, that there are not half a dozen medical men in Toronto, outside of the small "charmed circle" of which the "organ" is the central pivot, that will assert that he is a practically competent man for the position. Neither is he, in any sense, the choice of the profession in Toronto, as the "organ" would have its readers believe. He forced himself upon the attention of the House and the Government, by most persistent lobbying, and the presentation of petitions which he carried about the city for signatures, and thus secured for himself a position for which he has neither the leisure, nor the practical qualifications to properly fill. He, at present, holds a subordinate position in University College, as lecturer on "Italian," fills the office of "Curator of the Museum," and lecturer on "Sanitary Science" in the Toronto School of Medicine, and does some occasional work in the "Ontario Veterinary College," together with general practice. It is therefore impossible to expect that he can have sufficient leisure to do justice to the position, even if he possessed the necessary qualifications. With reference to his practical qualifications, we judged him entirely by his own record. It will be in the recollection of some of our readers who were cognizant of the facts at the time, that when asked, in common

with a number of his fellow-practitioners in this city, by a committee of medical men in the House, to give his views upon the public health question, and the best mode of procedure to induce the Government to provide for the establishment of the Provincial Board of Health, he treated the committee to a long dissertation about the drainage, or something of that sort, of Osgoode Hall, a matter entirely foreign to the subject in hand. His communication was laid on the table, with the remark by the chairman, that it had no reference whatever to the question under consideration. We would also refer the "organ" to his report upon some method of improving the sanitary condition of the City Hall.

The *Mail*, of February 4th, 1882, referring to this report, stated that "the Dr. gave it as his opinion that the only remedy which *presented itself to his mind* was to have new buildings erected." There was not a suggestion offered by this "eminently practical man" as to improving the sanitary, or rather unsanitary, condition of the present buildings. We have been told by practical men that the buildings—while not the best for the purpose—could at moderate expense be placed in a perfectly healthy condition.

It was the knowledge of such facts as the above, and others of a similar character, that might be mentioned, which shook our confidence in the ultimate success of the measure under his chairmanship, and led us to decline a seat on the Board, which was very strongly pressed upon us by the Registrar-General, and which also led us to say that "we did not approve of the appointment." If anything further is needed to show that we had good grounds for our statement we would refer our readers to his published address to his colleagues on the Board. Instead of proceeding at once to the work in hand, as a practical man would have done, he delivered a long address to his colleagues, a large portion of which referred to what had been done by sanitary reforms, which it is to be hoped for their own sake as well as the public, the members of the Board are quite as familiar with as the Chairman. It might have been well enough at a meeting to instruct a number of mechanics, but it was absurd and altogether useless and out of place as an instruction to his colleagues. The plea that the address was intended

for publication in the *Mail*, does not alter the facts.

At the instance of the Hon. Mr. Hardy, two members of the Board visited Sarnia, and reported in reference to the cause of the outbreak of typhoid fever in that place. Even this judicious action on the part of the Government was not a sufficient hint to the Chairman of the Board to lead him to direct an enquiry into the cause of the recent epidemic of a similar nature in Toronto. If there had been a practical man to direct the affairs of the Board, it surely would not have separated without an expression of opinion with regard to our own impure water supply, or a recommendation with reference to the danger to the health of the city by the contemplated closing up of the Eastern gap of the bay.

LABOUR EMPLOYMENT REGULATION BILL.

A bill to regulate the employment of labour in workshops, mills and factories, was introduced in the Dominion Senate during the past Session.

A somewhat similar bill was introduced during the Session previous to the last, in the House of Commons, by Dr. Bergin, but was not pressed because of the limited information in possession of the House. A Commission was appointed by the Government, consisting of two gentlemen who spent considerable time during the recess, in collecting information. They visited 465 factories in different parts of the Dominion, especially in Ontario, Quebec, Nova Scotia and New Brunswick. They found that the number of persons employed in these factories was about 43,000, of whom, 2,000 were children under ten years of age.

The report of the Commissioners which was laid before the Senate, gave in a very concise form, information which will be of great value in enabling the Government and the public to form an intelligent opinion with regard to the labour employed in factories and the small degree of protection afforded to those engaged in such employment. It was found by the Commission that the hours of labour varied very much in the different factories. In 48 of these factories the employés worked over ten hours per day; in 167, ten hours per day; and in 250, less than ten hours per day.

With reference to the sanitary condition of the

factories and health of the employ  s, the Commissioners seem, from the report, to have paid but little attention to this part of their work. While some of the large factories were everything that could be desired in this respect, many of the smaller ones, such as tobacco factories and others of that class, were far from creditable to the age in which we live. It was also found that in a large number of factories, one hour was allowed for dinner, but in a number of others it varied from half an hour to 50 minutes. The report of the Commissioners also showed that the provision made for urinals and other conveniences, in many of the factories was very imperfect. The same was also true with regard to means of escape in case of fire.

The principal provisions of the bill are as follows :—It provides that the hours of labour shall not exceed ten hours per day, or 60 hours per week. With regard to children of 10 to 14, the hours of labour are fixed at 30 per week, and shall not exceed eight hours per day. The bill fixes the time allowed for dinner at one hour ; and provision is made that no operative shall be allowed to take meals in a room where any manufacturing process is carried on ; and every employer is obliged to provide a suitable room within the precincts of the factory, in which the employ  s can take their meals. With regard to sanitary provisions, it requires that every factory shall be ventilated in such a way as to render harmless the vapors, dust, etc., generated in the manufacturing process carried on in them. It also provides that suitable arrangement for water-closets be made. The bill further provides that fire escapes shall be erected, and that all belting, shafting and gearing, be so covered that operatives may not come in contact with them, and that hoists, trap-doors, etc., be properly closed and guarded. The Governor-General in Council may from time to time make ordinance for enforcing the Act, by the appointment of one or more Inspectors. Penalty clauses are also inserted for any infraction of the law.

Although the measure is largely a tentative one, it cannot fail to have a most salutary effect upon the sanitary condition of factories, and on the health of employ  s. The introduction of the bill in the Senate occasioned a lively discussion, in which the medical men in the House took an active part. Hon. Dr. Almon, of Halifax, administered a well-

merited rebuke to the legal members for their great readiness in expressing opinions on matters which come more especially within the province of medical men.

REPORTS OF ASYLUMS FOR INSANE.

We have before us the reports of the medical superintendents of asylums for insane in this Province, for the year ending Sept. 30th, 1881, from which we glean the following information :—In the Toronto Asylum there were, at the close of the year, 673 patients, or 11 more, the Superintendent states, than they had beds for. During the year there were 762 patients under treatment. Of that number 88 were admitted, 54 were discharged (40 of them recovered and 8 improved), and 35 died. The per centage of recoveries on admissions during the year is about 45 per cent. as against 19 per cent. last year. In the London Asylum there were, on the 1st October, 1880, 784 patients in residence. During the year, 970 were under treatment. Of the latter, 73 were discharged, 38 died, 4 eloped, and 3 were transferred to other asylums, leaving in residence, on the 1st Sept., 1881, 852 patients. Of those discharged, 47 were recovered, 13 improved, and 12 unimproved. The number discharged recovered and improved was 60, or about 32 per cent. of the admissions, as against 36 per cent. last year. But, as Dr. Clarke very properly says in his report, the per centages fluctuate in asylums from year to year. In the Kingston Asylum there were in residence, on the 1st October, 1880, 433 patients. The total number under treatment during the year was 488 ; of these, 21 were discharged and 21 died during the year, leaving 446 remaining in the Asylum on 30th Sept., 1881. Of those discharged, 10 were cured, 10 improved, and 1 unimproved. In these three asylums there were confined, on the 1st Sept., 1881, no less than 1,971 patients, to which must be added those in Hamilton and Orillia, which foot up a very large total for the Province of Ontario. Besides, the universal cry of the superintendents is, More room, more room ! The Toronto Asylum is pressed to its utmost capacity, and even far beyond what is reasonable or just to the present inmates, to accommodate the increasing number of applicants, and the Government will be obliged, however unwilling, before long to provide additional accommodation. Where

there has been so much crowding, it is matter for wonder that the superintendents have not had to report the occurrence of serious endemics or a greater number of casualties among the more irresponsible class of inmates.

In glancing over the Inspector's reports, or "Minutes of Inspection recorded during the year,"—we presume they were *minutes* of inspection—we were very much impressed with the patronizing way in which that officer dealt with the subject, and the very free use he seemed disposed to make of the services of the "Medical Superintendents." No matter what little detail in his opinion required attention, it was noted down, with the remark that the "Medical Superintendent was required to see that it was attended to;" "the attention of the Medical Superintendent was called to this;" "the Medical Superintendent was instructed to have proper books prepared;" "the Medical Superintendent was requested to give his personal attention to the matter," etc., etc. Any person not acquainted with all the facts, and not knowing the character of the medical superintendents of the respective institutions for energy, fidelity to trust, and faithfulness in the performance of their duties, would infer that they had been guilty of gross carelessness, not to say criminality, in the discharge of their duties. It is the most complacent piece of self glorification we have seen for many a day, and we cannot but think these gentlemen whose names are so freely used to magnify the value and importance of his inspection, will heave a sigh of relief at the thought that his great talents have found a more fitting occupation.

TRINITY MEDICAL SCHOOL.

The annual meeting of the Trinity Medical School for the conferring of diplomas, awarding of medals, scholarships, certificates of honor, etc., was held on the 8th ult., Dr. Geikie in the chair. The proceedings were opened by the Provost, Rev. W. E. Body, reading prayers, after which Dr. Kirkland announced the names of those candidates who had passed the first year's examination, 56 in number. Their names appeared in the May number of the LANCET.

Dr. Kennedy presented the certificates of honour for standing in the primary branches, stating

that the contest had been very keen, neither of the successful candidates having far outstripped the others. The men who procured this distinction were J. E. Jenner, E. H. Williams, T. H. Robinson, and B. H. Scott.

Dr. Fulton read the names of those who had passed the primary examination, 26 in number, remarking that it was acknowledged to be very severe, the object of the faculty in making it so being to avoid, so far as possible, the failure of students in the succeeding and more important examinations.

SCHOLARSHIPS.—First year's scholarships: W. M. Brown, *first scholarship*; F. Snellgrove, *second scholarship*. The "second year's scholarship" was equally divided between E. Jenner and E. H. Williams.

PRIZES.—The "Baptie" prize in chemistry was won by E. H. Williams. F. H. Sawers received the prize in materia medica, given by Dr. Kennedy, and B. H. Scott a special prize for high standing in the same department.

FELLOWSHIP DIPLOMAS.—*Honor men*: W. H. McDonald, A. C. Gaviller, A. D. Smith, W. Bonnar, A. Cameron, H. H. Graham, W. Hanbidge, J. M. Johnston, J. Johnston, H. P. McCausland, J. T. Sutherland. *Passmen*: R. W. Belt, W. N. Brett, T. W. Duncombe, J. A. Gracy, S. A. Metherell, J. A. Urquhart, J. E. Shore, P. J. Strathy, and J. D. Wilson.

MEDALLISTS.—Trinity Gold Medallist, W. H. McDonald; first Silver Medallist, A. C. Gaviller; second do., A. D. Smith.

Dr. Covernton, in presenting those who had passed the final examination, said it gave him great pleasure as one of the examiners to testify to the unusual excellence of the papers prepared by the students during the past course. The two men whose names stood first on the list were the best men ever up at the school.

The Rev. Provost presented the gold medal to the recipient and congratulated him on the excellence of his examination, having attained the very high proportion of 97 per cent.

Dr. Fulton in presenting the first silver medal, alluded to the ability of the recipient in complimentary terms, and took occasion to advise those successful competitors who could do so to spend a few years in the study of pathology in Europe,

before settling in Canada, with the object of making themselves familiar with the most recent developments in science. New discoveries were daily being made, and he believed that in no other way could the faculties of the students be so quickly and fully developed. He also urged them to endeavour to excel in their profession, and not content themselves with securing a mere competence as practitioners.

Dr. Covertton presented the second silver medal with a few appropriate remarks.

Dr. Geikie, Dean of the Faculty, then admitted the successful final candidates to the fellowship of the school, endorsing in his address to the new doctors the suggestion of Dr. Fulton as to gaining all the knowledge they possibly could by travel before settling down to the business of their life in the Dominion.

ONTARIO MEDICAL ASSOCIATION.—The following is a list of papers to be read at the meeting of the Ontario Medical Association, June 7th and 8th—as far as received by the Secretary up to the 25th ult.:—Adenoma of the Pharynx—Dr. Ryerson, Toronto; Antiseptic treatment of Phthisis—Dr. Philip, Brantford; The Science of Medicine—Dr. Curry, Rockwood; Treatment of Laceration of the cervix uteri—Dr. Temple, Toronto; Hemorrhage after tonsillotomy—Dr. Powell, Edgar; Therapeutics of Insanity—Dr. D. Clark, Toronto; Trachelorrhaphy—Dr. Snow, New York; Reports of Cases in Surgery—Dr. Dupuis, Kingston; Locomotor Ataxia with Case—Dr. Stewart, Brucefield; Light in Schools—Dr. Palmer, Toronto; Venesection—Dr. Clark, Oshawa; Remarks on, and exhibition of case in surgery—Dr. Canniff, Toronto; The relation of Local Boards to the Provincial Board of Health—Dr. Yeomans, Mount Forest; Alcohol in disease—Dr. Bruce Smith, Sparta; A case of Eclampsia—Dr. Harrison, Selkirk; Treatment of Diphtheria, Dr. Mackelcan, Hamilton; Some points on measurements in surgical practice—Dr. Oldright, Toronto; Remarks on the Vital Statistics of Ontario—Dr. Playter, Toronto; Retroversion of the Uterus—Dr. Harris, of Brantford. Besides these, reports on the various departments of the science will be forthcoming—and, judging from the *personnel* of the Committees, much may be expected from them. From present indications there is every reason to believe that this meeting will be largely attended.

UNIVERSITY OF TORONTO MEDICAL EXAMINATIONS.—The following are the results of the recent examinations in the Faculty of Medicine:—*First year*.—H. Bascom, C. H. Britton, A. Broadfoot, E. Bourke, L. Carr, G. A. Cherry, F. W. Cane, J. D. Courtney, W. A. Goodall, H. N. Hoople, A. B. Kinsley, C. A. Crick, D. Minchin, D. Poole, M. R. Saunders, J. E. Sutherland, D. M. Stabler, H. E. Webster, J. W. Paterson, S. Stewart (J. H. Howell, *ægrotat* standing). Scholarships.—1st, H. N. Hoople; 2nd, L. Carr. *Second year*.—J. Bray, J. W. Clarke, J. S. Draper, R. Hearn, J. Johnston, T. D. Michael, A. F. McKenzie, J. W. Paterson, R. L. Stewart, S. Stewart, J. Spence, A. S. Thompson, W. H. Johnston, T. M. Milroy, W. H. Oliphant. Scholarships.—1st, J. W. Clarke; 2nd, A. F. McKenzie. *Third year*.—H. S. Clarke, F. J. Dolson, J. E. Hansler, J. A. Meldrum, W. J. Robinson. Scholarships.—1st, W. J. Robinson; 2nd, F. J. Dolson. Primary.—W. H. Carleton, W. F. Freeman. Final.—W. J. Charlton, R. Coulter, A. J. Freel, R. S. Frost, W. Gilpin, H. P. Jackson, J. G. Mennie, A. D. Nasmith, J. W. Rae, S. R. Rogers, J. E. Shore, P. C. Walmsley. *Fourth year*. J. F. Bell, G. S. Cleland, J. T. Duncan, W. F. Eastwood, R. M. Fisher, W. Hanbridge, W. H. Johnson, E. G. Knill, F. D. Kent, J. Lafferty, T. M. Milroy, T. F. McMahon, W. H. Oliphant, A. C. Panton, R. R. Wallace. University gold medal.—R. R. Wallace. University silver medal.—J. F. Duncan. Starr gold medal.—R. R. Wallace. Degree of M.D.—J. Anderson, M.B.

UNIVERSITY OF TRINITY COLLEGE, TORONTO.—The convocation for conferring degrees in medicine of this university was held on the 10th ult. The following are the names of the graduates:

Degree of M.B.—A. C. Gaviller, gold medallist; J. M. Johnston, silver medallist.

Certificates of Honor.—A. C. Gaviller, J. M. Johnston, W. H. Macdonald, A. D. Smith, J. T. Sutherland, J. Johnston, W. H. Brett, P. J. Strathy, J. W. Ray, T. M. Milroy, H. H. Graham.

Passmen.—H. H. Atkinson, R. W. Belt, F. D. Canfield, T. W. Duncombe, J. G. Davidson, J. A. Gracey, J. W. L. Hunter, W. Nattress, A. F. Pringle, J. Urquhart, H. C. Wilson, J. D. Wilson, E. R. Woods, D. McLeod.

M.D., C.M.—H. P. McCausland, J. Walker, F. E. Woolverton, F. C. Astley, J. C. Urquhart, G.

McLain, A. H. Ferguson, W. Honeywell, J. D. Bonnar, J. A. McNaughton, C. M. Freeman, T. H. Stark, R. J. McKinnon and R. A. Ross.

M.D.—R. B. Nevitt and R. Raikes.

BAD TASTE.—The Toronto School of Medicine organ of this city still persists in endeavoring to stir up bad feeling between the members of the Homœopathic and the regular profession in Ontario. This is, to say the least, in very bad taste. The position of these two bodies is very different in Ontario, from what it is in any other part of the world. The Homœopaths are incorporated by Act of Parliament with the general profession; representatives of both bodies sit together in the same council and make laws for the government of the profession as a whole. They are also associated together in the recently formed Provincial Board of Health, and therefore good taste and good policy both demand that there should be no unnecessary bitterness of feeling introduced. There certainly appears to be no good reason for all this abuse. No one can charge the Ontario Homœopaths with being aggressive, for, since the Act incorporating them with the general profession came into force, only a very few members of that school have been licensed to practise medicine in this Province. Surely those who are so conscious both of right and might, can afford to be a little more magnanimous.

THE BACILLI OF TUBERCLE.—At a recent meeting of the Physiological Society of Berlin, Dr. Koch gave a description and demonstration of organisms discovered by him in connection with tuberculosis. These organisms were detected by means of a peculiar process of staining which is given in detail in the *Lancet*, April 22nd, 1882, and by examination under very strong illumination. The tubercle bacilli as described by Koch, are seen as very small rods, one ten-thousand of an inch in length, and one sixty-thousandth of an inch in breadth. In some of them distinct spores may be seen. Koch found these organisms in tuberculous cavities and the sputum of phthisical patients. They were more numerous in recent tubercle than in old caseating centres. He performed a number of culture experiments in order to prove the identification of these organisms with tuberculosis, and the results were most striking. These observations have been subsequently con-

firmed by an independent investigation by Baumgarten. If well-founded, it is impossible to overestimate the importance of this discovery to medical science.

MALTINE AND LACTOPEPTINE.—We know of few articles more indispensable than those above named to the therapeutic *armamentarium* of the progressive physician, and we are glad to learn, from circular now before us, that both preparations have grown so largely in the esteem of the Canadian profession as to have rendered it necessary to establish a branch house in Canada, for the purpose of more satisfactorily meeting the existing and increasing demand. The fact stated proves that the value of the preparations is too fully recognized to require further endorsement from us at this time. We would say, however, that both houses interested, especially merit support, inasmuch as it has been a cardinal principle in the conduct of their business to keep their preparations strictly in the hands of the profession, a point of which, perhaps, the importance is not sufficiently recognized. While this "unwritten law" is ostensibly observed by manufacturing pharmacists generally, we regret to say that it is in too many cases kept only in the letter, while flagrantly violated in spirit—in illustration of which we may give some facts on another occasion.

Mr. Gisborne, a gentleman for many years connected with the Home Office, will have charge of the Canadian business of the firms alluded to. He has opened an office at No. 10 Colborne Street, and we have no doubt will make the Toronto house as congenial a centre as are the New York offices to physicians visiting the American metropolis. We extend to Mr. Gisborne a hearty welcome, and wish him the full measure of success due the important specialties he represents.

UNIVERSITY OF QUEEN'S COLLEGE.—The following is a list of the graduates in medicine of Queen's College, Kingston, Ont.:

M.D.—R. S. Anglin, Kingston; A. D. Cameron, Lancaster; A. P. Cornell, Portsmouth; H. N. Coulter, Aylmer; G. H. Denike, Fulton, N. Y.; J. M. Dupuis, Kingston; R. W. Garrett, Kingston; C. E. Jarvis, Nilestown; H. K. F. Koyl, Ada, Minn.; H. N. Macdonald, Cape Breton; A. A. Mordy, Almonte; J. L. Reeve, Clinton; D. B.

Rutherford, Belleville; J. M. Stewart, Portsmouth.

C.M.—G. Clinton, M.D., Deseronto; C. R. Dickson, M. D., Wolfe Island; W. H. Henderson, M. D.; Dr. W. J. Gibson, B.A., of Belleville also received the degree of M.A.

MEDICAL CANDIDATES FOR PARLIAMENTARY HONORS.—There seems to be an unusual number of medical men brought out as candidates for Parliamentary honors, in the approaching Dominion elections. The names of those already announced are as follows:—Dr. Wilson, East Elgin; Dr. Landerkin, S. Grey; Dr. Sproule, E. Grey; Dr. Sullivan, Kingston; Dr. St. Jean, Ottawa; Dr. Platt, Prince Edward; Dr. Ferguson, Welland; Dr. Chamberlain, Dundas; Dr. Sloan, E. Huron; Dr. Springer, S. Wentworth; Dr. Samson, Kent; Dr. Bergin, Stormont; Dr. Bowlby, N. Waterloo; Dr. Gravel, Beauce, Dr. Lesage, Dorchester, Dr. St. George, Portneuf, Que.; Dr. Borden, Kings, Dr. Forbes, Queens, N.S.

Dr. J. Hodgen, of St. Louis, a prominent surgeon, died suddenly on the 28th of April, aged 57 years. He was President of the American Medical Association in 1881.

The death on the 6th ult. of Prof. James R. Wood, of Bellevue Hospital Medical College, is announced in our medical exchanges.

NEW JERSEY STATE MEDICAL SOCIETY.—The resolution refusing to recognize the delegates from the New York State Society was rejected by a two-thirds vote.

FAREWELL BANQUET.—A farewell banquet was tendered to Dr. S. C. Corbett, by the citizens of Port Hope, on the eve of his departure for Winnipeg, Man., on the 6th ult. The Mayor occupied the chair, and the evening was most agreeably spent in toasts and sentiments of kindly feeling towards the Dr., who had labored among them for several years. He carries with him not only the best wishes of the people of Port Hope and vicinity, but also the kind regards of many professional and lay friends in different parts of the Province.

ROYAL COLLEGE OF PHYSICIANS, EDIN.—John Campbell, M.D., C.M., (McGill College,) of Seabrook, Ont., has passed the necessary examination

for the degree of L.R.C.P., Edin.; also, Dr. G. A. McNutt, of Darnley, P. E. I., and Geo. N. Whelan, of St. Johns, Nfld.

W. F. McLean, M.B. (Trinity College, Toronto), has taken the double qualification of Licentiate of the Royal College of Physicians and Surgeons, of Edinburgh.

VICTORIA MEDICAL COLLEGE.—The following gentlemen received the degree of M.D., C.M., at the recent convocation in the above named University:—W. H. Aikins, R. J. Burton, R. M. Coulter, J. T. Carroll, M. K. Colver, J. Campbell, G. W. Clendenan, M. R. Elliott, H. P. Jackson, W. J. Kellow, E. Laws, W. H. Montague, W. G. McDonald, D. Rose, S. R. Rogers, W. A. Ross, J. W. Wilmot, J. B. Whitely, J. H. Radford, W. D. Fowler, J. M. Piper, C. Wilson, G. M. Milne.

TORONTO MEDICAL SOCIETY.—The following officers have been elected for the ensuing year:—Dr. Geo. Wright, President; Drs. A. H. Wright and Wilson, Vice-Presidents; Dr. McPhedran, Secretary; Dr. J. Robinson, Corresponding Secretary; and Dr. McDonald, Treasurer.

CORRECTION.—In the list of those who passed the Council examination, printed in our last issue, the name of A. D. Thompson was given. It should have been A. S. Thompson.

The death of Dr. Geo. Budd, F.R.S., formerly of King's College Hospital, London, at the age of 75 years, is announced in our British exchanges.

APPOINTMENTS.—Dr. H. Watt has severed his connection with the Electro-Therapeutic Institution of this city, and has been appointed Medical Superintendent of the Royal Cariboo Hospital, Barkerville, B.C.

Dr. R. Douglass, of Port Elgin, Ont., has been appointed License Commissioner for the District of the North Riding of Bruce; and Dr. A. Rockwell, of Frankford, for the District of the West Riding of Hastings.

CORONERS.—Dr. J. M. Smith, of Hyde Park, Ont., has been appointed Associate Coroner for the Co. of Middlesex.

Dr. H. D. Fraser, of Perth, has also been appointed Associate Coroner for the County of Lanark.

Books and Pamphlets.

DISEASES OF WOMEN, INCLUDING THEIR PATHOLOGY CAUSATION SYMPTOMS, DIAGNOSIS AND TREATMENT. A Manual for Students and Practitioners. By Arthur W. Edis, M.D., Lond., F.R.C.P., M.R.C.S. Assistant Obstetric Physician, Middlesex Hospital, with 148 Illustrations. Philadelphia: H. C. Lea's Sons. Toronto: Willing & Williamson.

In this work, which comprises about 500 pages, will be found one of the most complete digests of the pathology, diagnosis and treatment of diseases of women yet published. The author has drawn largely, and with due acknowledgements, upon such works as Barnes, Thomas, and other writers on Gynecology, to which he has added judiciously from his own experience, and has produced a work which is a credit to any author. We have profited much by a perusal of its contents, and have great pleasure in recommending it to our readers. The illustrations are very good, and sufficiently numerous to elucidate the text. If we were asked to compare the work with those of Barnes, Thomas, and Emmett, our answer would be similar to that once given us by the late Dr. Rolph, when asked which of certain standard authors on medicine was the best for a student, he replied "I don't know, they are all good."

THE INTERNATIONAL ENCYCLOPEDIA OF SURGERY.

A systematic treatise on the Theory and Practice of Surgery, by authors of various nations. Illustrated with chromo-lithographs and wood-cuts. In 6 volumes. Vol. I. Edited by John Ashhurst, M.D., of Philadelphia. New York: William Wood & Co. Toronto: Willing & Williamson.

The object of this work is to furnish, in a comprehensive form, a systematic treatise upon all those subjects which properly pertain to the science and art of surgery, written by distinguished authors in various countries, who are believed to be specially qualified for the work. The First volume embraces such subjects as belong to General Surgery, including Inflammation. The Second volume will be devoted to Special Surgery; the Third and Fourth volumes, to the surgery of the Tissues and Injuries and diseases of Special Regions; and the Fifth and Sixth volumes, Regional surgery continued, and the History of Surgery, by Prof. Gross. An appendix will embrace papers on Hospital

Construction, etc. The authors of the present volume are D. Hayes Agnew, Ashhurst, Brinton, Butlin, Delafeld, Forbes, Hunt, Hunter, Johnston, Lyman, Mansell-Moullin, J. Lewis Smith, Stillé, Stricker, VanBuren, Verneuil, and Phillip S. Wales. With such an array of talent, it is wholly unnecessary to say anything in reference to the general excellence of the volume before us. The binding and general make-up of the book is all that can be desired.

CANCER OF THE BREAST. With colored illustrations. By Thos. W. Nunn, F.R.C.S., Eng. Consulting Surgeon to the Middlesex Hospital. London: J. & A. Churchill. Toronto: Willing & Williamson.

The work before us is a quarto edition of about 200 pages, and illustrated by twenty-two colored plates. It is divided into two parts—the first clinical and practical, the second pathological and speculative. The author makes no attempt to classify cancers, but, on the contrary, considers it more rational to endeavour to discover resemblances and stages by which they merge one into another, and form a reverse sequence of retrograde changes. In this respect he differs from most pathologists, who regard the distinctions as sufficiently pronounced to warrant the division into scirrhus, encephaloid, and epithelial cancer. The work is upon the whole a most interesting and valuable addition to the literature of the subject. The colored plates are most beautifully executed, and are faithful representations of specimens which have come under the author's own observation.

ORGANIC MATERIA MEDICA, by John M. Maisch, M.D. Philadelphia: Henry C. Lea's Son & Co., 1882.

This neat octavo, of 460 pages, is printed on excellent paper, and presents a large number of well executed plates. To those readers who wish to find in compressed form, that instruction which they are obliged to search for in large, or unwieldy forms, Dr. Maisch's book cannot fail to be acceptable.

Births, Marriages and Deaths.

On the 15th ult., Alexander McKay, M. D., of Beaverton, Ont., aged 55 years.

THE CANADA LANCET,

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Original Communications.

ON THE HYPODERMIC INJECTION OF CYANIDE OF MERCURY IN SYPHILIS OF THE EYE.

BY DR. GALEZOWSKI.

(Translated from *Le Progrès Médical*, by W. GRAHAM, M.D., Brussels, Ont.).

Syphilis of the eye presents itself under the most varied forms, and with such grave characters, that the most energetic treatment at present known is often powerless to retard the progress of the disease and to prevent the loss of sight. Serious forms of syphilis are observed in every part of the eye. We have Iritis, Irido-cyclitis, Choroiditis with pigmentation in the retina, Optic Neuritis, and Syphilitic papillary Atrophy. Daily experience shows us that all these affections unfortunately resist the most energetic and most varied forms of treatment. It is evident that this want of success is due to the inefficiency of the means employed, to the incomplete absorption of mercury, and probably due to the difficult assimilation of the usual remedies by the fluids and tissues upon which we wish to act. All the medical world to-day is convinced that it is not without importance to prescribe mercury under the form of pills, of the proto-iodide or corrosive sublimate, or to apply it in the form of strong mercurial ointment.

That which concerns us we have shown more than fifteen years ago, in an article communicated to the Academy of Medicine in 1869, that syphilitic choroiditis is not cured by any mercurial preparation, administered through the digestive tract, but that it is cured on the contrary, by the aid of mercurial frictions made upon different parts of the body during two consecutive years. To-day, after fifteen years' experience, we desire to confirm that assertion, at the same time making this reservation,

that in certain varieties of choroiditis this treatment is without efficacy. These mercurial frictions have not any action against syphilitic optic neuritis, no more than against papillary atrophy of the same nature.

In view of so many negative results, we have tried for over two years hypodermic injections of albuminate and peptonate of mercury, but it is our duty to declare that this method has not satisfied us, any more than its predecessors. In fact, these medicines although pushed to very large doses (200 or 300 grammes), have not been able to arrest either disease of the optic nerve or its consequent blindness. How ought we to view this want of success and what are the reasons which prevent the mercurial preparations from acting on the visual organs, when these same preparations check all other syphilitic symptoms, even the most grave? This has led us to an analysis of the question by studying some very interesting cases.

Three years ago we had under our care, with Prof. Fournier, a young man suffering from optic neuritis, with epileptiform symptoms of the most serious character. In the course of the disease, iritis and a syphilitic sarcocele showed themselves. Mercurial frictions and iodide of potassium arrested all the general symptoms, but the optic nerve became atrophied and the sight was completely lost. We have experienced similar failures in papillary atrophy. One could certainly explain this failure by the non-syphilitic cause of papillary atrophy, in admitting which this last affection may only come in a syphilitic by a coincidence. However, these two maladies are met with so frequently together, that it is difficult to see in all those cases only the simple result of chance. For our own part, we have known numbers of cases which show, without doubt, that atrophy is liable to develop itself under the direct influence of syphilis, without which the anti-syphilitic remedies employed would produce very little effect. Therefore since the most energetic treatment has been powerless to check the disease of the optic nerve, it is necessary to ask if the preparations employed in these cases have really a direct action upon the nerves of the eye, and to look for some mercurial preparation more efficacious and more easily absorbed.

The cyanide of mercury has appeared to present some great advantages, and the experiments we have made for over three months have completely

confirmed us in that opinion. This medicine is, as we shall see further on, one of the most powerful which exists to combat, not only the eye symptoms, but all the syphilitic affections of the eye having a cerebral origin. Before administering the cyanide hypodermically in man, we made with M. Despagne, our clinical assistant, some experiments with animals, with the following results: In making injections of this solution in the dorsal region in rabbits weighing three to four pounds, we have seen paralysis of all the extremities produced, then general anæsthesia, diminution of heart beats, venous stasis in the optic papilla, and anæsthesia of the cornea. At the end of two hours all those symptoms had disappeared and the animal returned to its former state. With an animal younger and weighing only two pounds the same phenomena were produced, but they were followed by cessation of the heart's action and a fatal asphyxia. In forming a basis upon these experiments, we have been already able to draw this very important conclusion: that it is necessary to limit it in man to very small doses of 5 to 10 milligrammes for each injection. From daily experience we have, by the following, amply shown that in effect these doses have a very energetic action upon syphilis, and are very readily borne. In exceeding these doses, on the contrary, they provoke severe colic and diarrhœa. We have already made 234 injections amongst seven patients, and almost all of them have experienced excellent results. Iritis, with condyloma or with phlyctenular keratitis, has been cured after five, eight or ten injections, always in the dose of from 5 to 10 milligrammes. These injections do not leave any nodosity in the cellular tissue of the skin. We have the solution prepared according to Mialhe, in the proportion of 1 milligramme to a drop, making the dose easily calculated.

The four following observations prove the very great rapidity of action of cyanide of mercury in complicated iritis, which had resisted all former treatment, and which presented from the onset symptoms of exceptional gravity. These observations have been gathered by M. Despagne, who had charge of making the injections.

CASE I. *Right Iritis, with interstitial infiltration of the Cornea—Syphilis. Cured by injection of cyanide of mercury.* M. M., æt. 28, draughtsman; has had, 6 years ago, a blenorrhagia, with

indurated chancre of the urethra, followed by all the secondary symptoms of syphilis.

Dec. 25, 1881. Orbital pains, photophobia, pericorneal injection. For eight days he had applied poultices and cold lotions.

Jan. 2, 1882. He came for consultation; congestion very intense throughout the globe; photophobia; violent pains in front and on the temples. Irregular pupil; cornea infiltrated, whitish in places, the vessels commencing to invade it in certain spots.

Treatment.—Instillation of atropine, and hypodermic injection of cyanide of mercury. The solution contained 1 milligramme of the cyanide per drop. I made the first injection of 5 drops, the second 7, the third 10. After the sixth injection all trace of corneal infiltration had disappeared. There was scarcely any peri-keratic injection. The ciliary pain had completely gone after the third injection. I injected 15 milligrammes without the least accident. No salivation, no nodosity at the site of injection. After the tenth injection the iritis was completely cured. The visual acuity is normal. There remains upon the capsule a small round spot, formed by pigment.

CASE II. *Left Iritis—Condyloma.* S., æt. 44, coachman; syphilis 11 years ago. Came on Jan. 19, 1882, for advice. He is ailing since Dec. 20. Left iritis very pronounced, with adherent pupil below and above. Condyloma upon the external and inferior papillary border.

Treatment.—Five leeches to the temple, instillation of atropine, hypodermic injection of the cyanide of mercury. At the beginning, I injected 1 centigramme of the mercurial salt, and I increased the dose to 2 centigrammes in four days. The fifth day the condyloma had disappeared. After the eighth injection there remained of the iritis only the inferior synechia.

CASE III. Mme. D., æt. 46. Has an affection of the left eye for four years. Towards the end of November, 1881, the right became equally inflamed. She came to the clinic. We recognized in the right eye an iritis with phlyctenular keratitis, and an irido-choroiditis in the left, with papillary obstruction. We proposed for this eye an iridectomy, which was performed on the 23rd December. To the right we applied some leeches and the instillation of atropine. The patient is not rheumatic. She has been married twice, has not had any children. She denies all syphilitic antecedents. Under

the influence of antiphlogistic treatment the iritis seemed to get better, but on the 30th December suffered a relapse. This time the iritis was very much more pronounced. We dropped the atropine in the eye and ordered hypodermic injections of the cyanide. The first injection was 5 milligrammes, gradually increasing the dose to 15. The injections were very well borne, without salivation. No nodules of induration at the point of injection. They were all made in the dorsal region. The iritis was completely cured after the ninth injection, a small inferior synechia remaining. After the fifteenth injection, the patient recognized an improvement in the sight of the left eye. Before the injections, $S=\frac{1}{2}$; after the injections, $S=4$.

CASE IV. *Left Iritis, with phlyctenular Keratitis.* Mme. V., æt. 66. Came to the clinic on Dauphin-street, 24th Dec., 1881. For three days an intense inflammation has shown itself in the left eye, and at the same time accompanied by intolerable peri-orbital pains, increased especially at night to such an extent, that the patient has passed nine days consecutively without sleep. She confesses syphilitic antecedents; she is also rheumatic. When we saw her we recognized a well-marked iritis, with all the characteristics of a serious form. We prescribed leeches, atropine, salicylate of soda doses of 2 grammes a day at first and 4 grammes afterwards; no improvement. The condition of the patient became worse; want of appetite was added to insomnia. The eighth day the iris was cloudy and the cornea presented interstitial punctæ. After the complication we stopped the salicylate and prescribed the cyanide of mercury by injection. From the first day the patient was able to take rest, although she had not been able to sleep for a fortnight. After the second, the cephalalgia had completely ceased. The sixth day the iritis was completely cured. At the beginning we injected 5 milligrammes, at the end 1 centigramme of the mercurial salt. Six injections were sufficient to conquer the iritis. The keratitis has been more rebellious. Now she is completely cured. In an abridged form, we give some notes on other patients under treatment.

CASE V. Mme. D., æt. 46; afflicted with double syphilitic irido-choroiditis. After twenty injections, acuity of vision increased one-third.

CASE VI. M. B., æt. 22; attacked with an iritis with interstitial keratitis, and the most violent peri-

orbital neuralgic pains. After a course of eighteen injections the pain ceased, but the keratitis pursued its regular course.

CASE VII. Mme. A., æt. 32; attacked with a double iritis and condyloma. The mixed antiseptic treatment, pills of proto-iodide and mercurial frictions were unable to modify the disease. Cure was obtained after twelve injections of the Cyanide.

CASE VIII. M. G., æt. 50; afflicted for eight months with a double syphilitic retinitis. He has submitted to the mercurial treatment by frictions for six months, without any improvement. Since the month of December last, M. Despagne has made twenty four injections of 5 to 10 milligrammes of the cyanide per day. The patient bore them well and is now much better. His acuity of vision has increased one-third. The peri-papillary infiltration has very notably diminished.

CASE IX. Mme. N., æt. 57; has had syphilitic symptoms for two years, and since two months has been seized with a severe iritis, with some slight synechia and keratitis. The corrosive sublimate pills which she took at the commencement of her trouble, have not been productive of good. After fifteen injections of from 3 to 5 milligrammes of the cyanide, she is thoroughly cured.

ON ADENOMA OF THE VAULT OF THE PHARYNX.

BY G. S. RYERSON, M.D., L.R.C.P. AND S., EDIN.,

Lecturer on the Eye, Ear and Throat in Trinity Medical College, Toronto; Surgeon to the Mercer Eye and Ear Infirmary.*

Mr. President and Gentlemen,—I am induced to bring this subject to your notice on account of the prevalence of these growths, and because the symptoms are liable to be mistaken for nasal catarrh, and treatment directed to it would thus be unavailing. Also because of the danger incurred by the important functions of voice and hearing by its neglect. As patients suffering from this disease generally do not come to seek advice until the affection is fully established, the symptoms are usually well marked and voice and hearing not infrequently impaired.

The complaint is of frequent droppings into the

* Read before the Ontario Medical Association, June 7th, 1882.

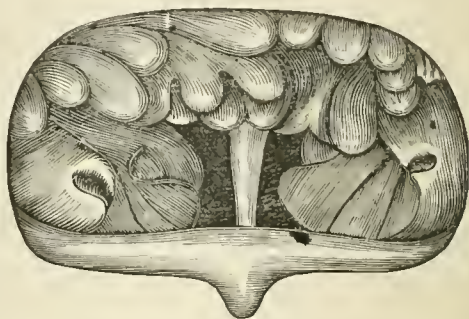
throat and of great discharge in the morning. They say that they are obliged to spend half an hour in clearing the throat before they are able to speak; they often complain also of loss of appetite, heartburn or acidity due to a catarrhal condition of the mucous membrane of the stomach from involuntarily swallowing decomposing mucus. Owing to obstruction to the posterior nares, the patients are obliged to breathe through the mouth during sleep, hence a dry, parched mouth on awakening; the throat often is red and sore for the same reason. The disturbance of digestion causes a bad taste (coppery) to be complained of. I remember one case where this was the chief ground of complaint and where every kind of digestive tonic had been taken in vain, and where relief was obtained by local treatment to the pharynx. There is a pretty constant feeling of having a cold in the head, a feeling of stuffiness, attended by discharge, which is not however through the nose, but into the mouth. This mucus is thick and stringy, of a yellowish-green color and frequently mixed with blood. Patients are often greatly alarmed on expectorating some pure blood, for these growths bleed easily and violent hawking may cause some hemorrhage.

As a consequence of the alteration in shape and diminution in size of the vault of the pharynx by these growths, the resonance and brilliancy of the voice becomes greatly impaired; the voice becomes what Meyer calls "dead" or flat. The nasal sounds are badly enunciated; tones such as "m" and "n" becoming "b" and "d". To the singing voice, such impairment is fatal. Difficult vocal movements, such as "staccato" or "pianissimo" are impossible. This disease further affects the larynx directly, by causing a pharyngo-laryngeal catarrh by continuity; also by the soft palate carrying the mucus to the tip of the uvula and thence dropping on to the arytenoids and into the larynx.

Another result of the obstruction to nose breathing is deformity of the nose, a drawing in of the alæ, a flattening of the bridge, a narrowing of the sides, or a generally stunted condition of the organ. It also gives to the face a stolid, expressionless look, which is quite characteristic. The chest suffers in some cases in young children; the sternum is projected forward, causing "pigeon breast." Respiration is noisy on exertion, and there is much snoring during sleep. There is also frequently a general arrest of development.

It not infrequently happens that, on examining patients who present themselves on account of catarrhal deafness, with the rhinoscopic mirror, one finds these growths. They do not cause deafness, as some writers have asserted, by pressure on the Eustachian orifice, but by setting up more or less inflammatory action in the tube by contiguity. This extends to the middle ear, and thus hearing becomes impaired. It is impossible to conceive that such soft, friable bodies could exert pressure on the hard cartilaginous orifice of the tube.

This disease occurs in young adults and children; about equally divided between males and females. Meyer, of Copenhagen, met with 102 cases in eighteen months, after his attention was drawn to the matter; and on examining 2,000 school children, he found 20 with adenoma pharyngis. All of these had the "dead" pronunciation.



On local examination, one finds more or less chronic follicular pharyngitis, with ropy, yellowish-green pus descending from behind the palate. With the rhinoscopic mirror, a flattened or more or less peduncled growth or growths of a pale reddish-grey color are to be seen; they vary in number from a single nodule to numerous lobules, which have been said to resemble a mass of earthworms. To the finger they are soft and friable, though occasionally tough and elastic; they will often be found to fill up the posterior nares to a great extent. When large, even lifting the palate will reveal their presence. It is generally useful to use the finger as well, in examining this part; it gives the most reliable information as to consistency.

Causation.—A cold or variable climate may be justly accused of causing these growths; thus they are more frequently met with in Denmark than in southern Europe. The lymphatic temperament has great influence, especially in young children.

Heredity plays an important part in their production. Lowenberg, of Paris, gives an account of a family in which the mother and four children were affected with these tumors.

Pathology.—The great William Hunter was the first to point out the existence of glandular tissue in the vault of the pharynx. He made some beautiful preparations, which are now in the Hunterian museum in Glasgow. The best description, however, has been given by Luschka. Cohen says, quoting him, "It usually presents in the form of irregular longitudinal prominences, separated by shallower or deeper fissures and distinctly studded with minute whitish follicles, less in size than poppy seeds. A number of round pores are likewise observed, the orifices of venous glands, and in part also depressed follicles. At the lower portion of the middle of the mass there is a large oblong pore the size of a large pin-head, well defined superiorly, which is the orifice of a pouch-like appendix of the vault of the pharynx (bursa pharyngea). According to Lacauchie, as confirmed by Kôlliker and Luschka, the adenoid tissue at the vault of the pharynx is a conglobate glandular mass, having the same structure as the tonsils; hence it has been called the pharyngeal tonsil. It is soft and spongy, and so closely incorporated with the cartilaginous tissue uniting the pharynx to the base of the cranium, that it is exceedingly difficult to separate them. The follicles are identical in structure with the solitary follicles of the intestine." The adenomata consists of a hypertrophy of this tissue, with more or less connective-tissue degeneration.

With regard to the *Prognosis*, Lowenberg says, "Unfortunately they do not heal spontaneously, and the sad results of this 'laissez-aller' treatment are not long in showing themselves in a dull aspect, ridiculous enunciation, etc." These tumors grow during early life and remain stationary during youth and adult life; but inasmuch as their presence gives rise to the serious train of symptoms before related, it is highly desirable that they should be removed. The results after extirpation are very satisfactory.

The differential *diagnosis* between these growths and polypus is important. Thus, polypus is found at all ages, whereas adenoma only in infancy and youth. Polypus causes discomfort in the nose, adenoma none. Polypus rarely causes deafness, adenoma generally does. Polypus appears at the

anterior or posterior nares, whereas adenoma is strictly localized to the upper part of the pharynx.

Treatment.—To treat these tumors successfully, nothing but removal will avail. It has been proposed to use various caustic substances for this purpose, but their action is uncertain, and in the case of nitrate of silver, only tends to increase proliferation. The galvano-cautery is more satisfactory and has the advantage that there is little hemorrhage after its use. Jarvis' wire snare, such as modified by Bosworth, also acts well. But the instrument which I prefer is Cohen's cutting spoons. This instrument is introduced behind the velum, and the mass brought away in portions. There is usually some bleeding, but is never serious. In the case of children, it is generally better to give an anæsthetic. The after-treatment consists in painting the part with Acid tannic, gr. xx.; Glycerin, ʒiij.; Aq. ad., ʒj., twice a day. At the same time giving Syr. Hypophos. Co. (Fellows') and Syr. Ferri Iodidi internally.

Dr. Ryerson then showed the case of a young girl, æt. 9, with pedunculated growths in pharynx. She had the oral respiration, stunted nose and expressionless, "gawky" face in a marked degree. Also a young lady with marked deafness, with a large flattened growth.

In the discussion which followed, Dr. Osler, of Montreal, said that he had seen most striking improvement after the removal of these growths. He further stated that Dr. Buller was in the habit of removing them with his finger-nail, also with a curette (probably Mackenzie's).

Dr. Powell, of Edgar, wanted to know if the Eustachian tube was ever injured by the galvano-cautery or forceps.

Dr. Ryerson, in reply, said he thought the finger and curette were only applicable to small and pedunculated growths, and that he had never known the tube to be injured, but that it might be by a careless or inexperienced operator.

CASE OF SUPPRESSION OF URINE FOR THIRTY DAYS.

BY GEO. BRERETON, M.D., C.M., BETHANY, ONT.,
(Fellow of Trinity Medical School).

On the 13th of January, 1882, I was consulted with regard to M. S., an intelligent girl, æt. 11, fair

complexion, average in form ; had scarlet fever at 18 months' old, followed by dropsy of short duration. Two years ago she was troubled with diminution of the urinary secretion, but under treatment recovered in a short time ; with these exceptions she has, up to the present time, enjoyed good health. As I did not see the case at this date, the symptoms as related by her mother were, that she did not pass a sufficient quantity of urine and was pained on micturating ; complained of a weakness over the hypogastric region, increasing to actual pain on lying down ; quantity of urine voided not more than two tablespoonfuls daily ; had been this way for a week, although she ate and drank as well as usual. Prescribed a diuretic mixture, ordered a warm bath morning and evening and gave a Dover's powder to prevent pain on lying down.

On the 18th, five days later, was summoned to see the case. Patient had no desire to micturate, except when bathed ; no change in quantity voided, dull pain over kidneys and right side, pulse 100, temp. 100° F., tongue clean and very red ; urine strongly alkaline, specific gravity normal, contained no trace of albumen ; under the microscope, a few epithelial cells were noticed. Prescribed mineral acids with chalybeates, continued the bathing and applied friction to the skin and a stimulating embrocation over the kidneys and bowels. From this date up to the 27th the patient rapidly improved, but after the 27th, although the treatment was continued, she grew worse, and by the 4th of February was only voiding half an ounce of urine daily. During the period from the 4th of February to the 2nd of March, she only voided from one drachm to half an ounce, irregularly, every third or fourth day, and only evinced a desire to micturate when bathed ; complained of no headache, eye-sight good, tongue clean but very red, appetite fair, better some days than others, average beat of the pulse 110, average temp. 101.5° F., respirations slightly accelerated, bowels regular, the excretions were not liquid, patient drank as freely as when in health, no symptoms of dropsy, slight swelling in the right groin, accompanied with slight pain at intervals. Towards the close of this period, slight dulness was detected over the right lung, on percussion and auscultation, skin keeps dry, rested fairly at nights. During this period the treatment consisted in diuretics, chalybeates, baths, friction to the surface of the body, with counter-irritation

over the kidneys. Iodide of potassium was tried, but could not be borne by the patient.

From the 2nd of March to the 2nd of April, or a period of thirty days, not one single drop of urine was voided. During this time the dulness over the right lung increased ; she expectorated small quantities of blood for two or three days at three different times ; average beat of the pulse 115, average temp. 102° F., bowels continued regular, evacuations were not liquid, took as much fluid into the system as before, no symptoms of dropsy. Patient was closely watched and it was impossible for urine to be voided without knowing it ; no muscular twitchings or uræmic symptoms noticed, rested fairly. Spirits good ; always up during the day, playing through the house, but during the last fortnight of this period she was more disposed to lie and rest. Gradually failing in flesh and strength ; skin harsh, dry and sallow ; never perspired until permanent improvement took place. From the onset of the disease she never vomited ; no calculi were at any time detected.

On the morning of the 2nd of April she passed a pint of normal-looking urine and has continued to urinate regularly since, and has improved both in appearance and strength. The treatment pursued during this period consisted in baths, chalybeates, potashes, hydropneumatisms and dry cupping over the kidneys.

This case is instructive in one respect, and suggestive of a caution in judging of the probable termination, in a protracted case of suppression. So far, I have not discovered more than two well-authenticated cases of suppression, where the patient recovered, when the suppression continued longer than the eighth day. These cases are cited by Dr. Roberts, Physician to the Manchester Infirmary, in his work on Urinary diseases. Nor have I discovered more than two cases of complete suppression or approached completeness, where the patient survived beyond the eleventh day. One of these is recorded by Sir J. Paget. The patient was 73 years of age. The right kidney was atrophied and apparently incapable of secreting urine ; the left was hypertrophied and the ureter blocked by a stone. With the exception of passing a considerable quantity of urine on the fourteenth day, total suppression ensued for twenty-one days, or up to the death of the patient. The second case is recorded by Dr. Rayer. The patient was a man 64

self to the consideration of "Excision of the Intestinal Canal where Covered with Peritoneum," and the address on obstetrics by Dr. H. O. Marcy, of Boston, on the subject of "Uterine Fibroids." Dr. Marcy's lecture was illustrated by microscopic preparations thrown on a screen by the solar microscope. The papers read in the sections were not quite up to the average in scientific value; they were also few in number, and the topics presented did not elicit interesting discussion. The question of establishing a weekly medical journal, instead of a bulky volume of transactions, was again up for discussion, and a board of trustees was appointed with instructions to ascertain whether or not the profession will give sufficient pecuniary support to maintain a weekly journal. Two thousand subscriptions will have to be guaranteed before the committee can enter upon arrangements for its publication. The editor's salary is to be \$6,000, including salary of assistants. The journal is to be entitled "The Journal of the American Medical Association," and the subscription price to non-members of the Association \$6 per annum.

The social element of the Association was, as usual, one of the grand features of the meeting, and the Committee of Arrangements deserve great credit for the admirable manner in which they discharged their duties. Dr. John L. Atlee, of Lancaster, Pa., was chosen President, and Cleveland was selected as the next place of meeting on the first Tuesday in June, 1883.

THE ONTARIO MEDICAL COUNCIL.

This representative body held its annual meeting on the 13th ult. and following days, the minutes and proceedings of which will be found in another column. The members of the Council are to be congratulated upon one of the most agreeable and successful meetings ever held by that body. One of the local papers stated that the present meeting was "distinguished for the urbanity and courteous deference to each other which should always distinguish the deliberations of gentlemen, not a single circumstance having transpired to mar the harmony of the proceedings from the commencement until the close of the session." We are very much pleased, both for the sake of the profession and the Council, to be able to fully en-

dorse the above statement, and at the same time to express the hope that the bitterness and strife which formerly characterized the proceedings of this body, may never be witnessed again. The various committees did their work quietly, and the general sessions of the Council were conducted in a most business-like manner. The adoption of the Intermediate High School examination, with Latin included, in lieu of the matriculation examination, has been found to work well; and although an effort was made to induce the Council to return to the yearly examination of students, which created so much difficulty and confusion formerly, the proposer did not find a seconder on the Education Committee. The present arrangement, of a primary and final examination, works well, and has both simplicity and efficiency to recommend it to the good sense of the majority. Considerable expense was saved the Council last year by dispensing with the services of the Executive Committee, and the same plan is to be continued. The President, Vice President, and Dr. Henderson, of Strathroy, were appointed as an Executive Committee for the current year, but they are not to be called together unless some unforeseen circumstance should arise. Although it was recommended to increase the annual assessment, the Council has wisely refrained from doing so, at least for the present. It is confidently expected that the Local Government will yet see its way clear to give a grant in aid of a building fund, museum, and library, and, if so, there will be no occasion to increase the annual assessment above the present sum of \$1.00.

THE ONTARIO MEDICAL ASSOCIATION.

The second annual meeting of this young and vigorous medical society took place in Toronto on the 7th and 8th ult., and was well attended. Dr. C. W. Covernton presided with his usual ability and courtesy. He delivered a very able and interesting address, abstracts of which will be found in another column. A large number of interesting and valuable papers were read, and discussed—the whole of the time of the Association, morning, afternoon and evening, being taken up with the reading of papers and reports in the various departments of medicine. The very large attendance

both last year and this, shows in a most unmistakable manner the wisdom of establishing the Association. The wonder now is that it was not organized long ago. The papers read at the meeting will be published from time to time in the medical journals during the year, and will no doubt be duly appreciated by the profession generally. Although we have no particular fault to find with the papers read before the Association, we hope to see an improvement in their quantity and quality from year to year. What is wanted is the individual experience of members themselves in their various modes of procedure, and not what they may glean from authorities.

The decision of the Association to continue to hold its meetings in Toronto was a wise one, and will tend greatly to the advancement of the interests of the Association. This city is most centrally situated, and is within easy reach of all parts of the Province. The complaint of the want of a proper hall in which to meet, is one which can be easily remedied in future. We are pleased to observe that the Ontario Medical Council has taken steps to dispose of the present unsuitable building, and erect one worthy of the college in some other part of the city—where a suitable plot of ground can be obtained for the purpose. In the meantime a suitable hall will be provided for the meetings of the Association and every attention given to the comfort of members who may honor us with their presence.

Dr. Avery, of Lansing, Mich., was present as a delegate from the Michigan State Board of Health, and gave a very interesting account of the work they are doing in reference to public health in that State. He was invited to take a seat upon the platform, as was also Dr. Fenwick, of Montreal, President of the Dominion Medical Association. Dr. Fenwick entirely disclaimed any feeling of jealousy regarding the success of this Association, or the entertainment of any idea that it would intrench upon the domain of the Dominion Association, as some had feared. On the contrary, he hoped that each Province would establish a similar Association, which remark was warmly applauded by the meeting.

Dr. McDonald, of Hamilton, was elected President, and the next annual meeting will take place in Toronto, on the first Wednesday in June, 1883.

GEORGE W. CAMPBELL, M.D.. LL.D.

It is our painful duty to announce the death of Dr. Geo. W. Campbell, Dean of the Medical Faculty of McGill College, Montreal, which took place in Edinburgh on the 30th of May last. The deceased was born in Scotland in 1810, and early entered upon his medical studies, which he pursued in the University of Glasgow and also in Dublin. After taking his degree with distinction, he sailed for the New World in May, 1833, and settled in Montreal, with the growth and development of which he has ever since been identified. He was one of the founders of the Medical School, which subsequently became the medical faculty of McGill University, and his influence went far toward raising it to its present position. He has been for many years a director of the Bank of Montreal, and latterly its Vice-President, also a director of the Montreal Telegraph Company, and of the City Gas Company. He was for many years on the attending staff of the General Hospital, and was the first physician who became a member of the internal Board of Management, and contributed liberally to this and many other charities. The degree of LL.D. was conferred upon him by McGill College. He leaves one son, Dr. Lorne Campbell, and five daughters. The son is following his father's profession, and accompanied him in his present trip to Scotland, to complete his medical studies there, and was with him when he died. Two of his daughters are married, one in Edinburgh and one in Marseilles.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of this college was held in Montreal, on the 10th of May, the president, Dr. Howard, in the chair. After routine, the president announced that at the recent session of the Legislature the college had obtained amendments to the Act with reference to the penal clauses. The tariff passed last year had been abolished, but the college had power to establish another. The following gentlemen were reported as having passed the matriculation examination in medicine:—Messrs. A. Letourneau, H. E. Choquette, A. Rolland, O. Ostigny, C. Collet, J. L. Duffett, T. Charon, C. Pilon, F. Marquis, J. Laberge, L. J. H. Roy, A.

years of age. The ureter of the left kidney was blocked up by a calculus and suppression of urine ensued, which proved fatal in twenty-five days, and during that interval only two ounces of urine were voided by the patient.

[Dr. W. B. Geikie, of Toronto, reported in the CANADA LANCET for October, 1876, a case of "Gastric Ulcer, with entire Suppression of Urine for 30 days," ending in recovery].—Ed. LANCET.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—In the April number of the LANCET, in an editorial on the last report of the Registrar-General of Ontario, you conclude by referring to the many inaccuracies and the absurd phraseology in the report; and in the LANCET of June you were good enough to give me not a little credit for work done in connection with the preparation of the reports in the Department. I wish to state that I am in no way responsible for these inaccuracies nor for the ridiculous phraseology indulged in.

The general review of the vital statistics of Ontario, including the whole time since registration first came into force in the Province, which I made up and which is appended to the last annual report, was, after it first left my hands, in the proofs, so transposed and mangled, in the office of the Provincial Secretary, and doubtless for a purpose, that I took an opportunity and much trouble to go over it again and put it as nearly right as I could without having the whole text re-set, for it was in a most ridiculous and shameful state. It is still so much so—so inaccurate in some parts, that I wrote to the Registrar-General, Mr. Hardy, disclaiming all responsibility in regard to the errors in it.

The usual annual reports, in which I felt less interested, and only assisted Mr. Crewe in the compilation of, I did not go over or revise in the proof these last two years, and they went forth as you find them, the text transposed and generally mixed and mutilated (instead of "revised"); this was particularly the case with the last one, which you justly criticized in the LANCET of April.

Yours, etc.,

EDWARD PLAYTER.

May 20, 1882.

[The above was received too late for the June number].—Ed.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The second annual meeting of the above named Association was held in Toronto on the 7th & 8th ult., Dr. Covernton, President, in the chair. A large attendance was present. The minutes of the last meeting were read by Dr. J. E. White, Secretary.

A communication was received from Dr. Powell, Ottawa, suggesting the advisability of establishing a "Mutual Benefit Association." The communication recommended a scale of graduated annual payments, with certain sums to be paid to the families of physicians in case of death. The communication was referred to the committee on papers and business.

A number of new members were then proposed and elected members of the Association.

The President then delivered an able and learned address. After dwelling upon the responsibility resting upon physicians in the exercise of their profession, and cautioning them against being too rash in putting into practice the sparkling novelties in theories that were brought forward, he gave a sketch of the work already done by the Provincial Board of Health. He dwelt upon the importance of Government enquiry into the health of cities, towns, and country, and the regulation of matters concerning the health of the people. He pointed out that equal necessity existed for the isolation of patients suffering from scarlet fever and diphtheria as of those suffering from small-pox, the more especially as there was no such protection as vaccination against the former diseases. No efforts to protect a community against the ravages of infectious diseases would be entirely successful until some public action was taken to instruct the people concerning the initial symptoms as well as the contagiousness of those forms of sickness, and concerning the measures which should at once be adopted for the protection of their own and other children.

It was also necessary that the sanitary authorities, in performing their duties for the isolation of the sick, and in the disinfection of affected houses, should act in a considerate spirit, or the public would withhold their support. He proceeded to impress upon members of the profession the im-

portance of co-operating with the Provincial Board of Health in collecting vital statistics, of reporting to the public health officer every case of infectious disease coming under their notice, and of urging on their several municipalities the establishment of local boards of health and the appointment of local health officers. These local health officers by occasional lectures on the fundamental principles of hygiene could do much for the benefit of their respective communities.

The germ theory of zymotic and other diseases was adverted to, and the necessity of microscopic analysis in discovering the origin and progress of diseases was considered. He then referred to the discoveries made which clearly traced the origin of many of these diseases to the presence in the blood of *bacteria*, whose deadly influence could be lessened by certain preventive methods of treatment, or by inoculation for a mild type of disease. He stated that water was the most usual vehicle for conveying these germs into the human system, and pointed out how careful people should be in the selection of their drinking water.

He next referred to the discoveries of Koch with reference to the *bacilli* of tuberculosis, and the theory of the contagious nature of tubercular phthisis, which was gaining ground among members of the profession. In relation to the disposal of the bodies of persons dying from contagious diseases the lecturer spoke of cremation as destroying all possibility of infection from those bodies. What favour the system may meet with among medical men remains to be seen, but there was little doubt that the public generally would, at least at present, oppose any such method of disposing of the bodies of their relatives.

The President concluded an exhaustive address by warning those present of the great responsibility which rested upon them in regard to the preservation of the public health, and he adjured them not to shrink from the duty which an honourable profession entailed upon them.

Dr. Philip, of Brantford, read a paper on the "Antiseptic Treatment of *Phthisis*." This disease had been treated with marked success by the continuous inhalation of the vapour of carbolic acid or other antiseptic agents. The *British Medical Journal* was quoted as being in favour of such applications to internal suppurating surfaces, as their external use in similar cases had been attended

with such decided benefit. The opinions of Virchow and other eminent German pathologists in relation to tubercles were entirely subversive of the commonly entertained opinions, both in reference to tubercles and tuberculosis pulmonalis. He gave the particulars of a case in which this treatment had been followed by very satisfactory results. He also exhibited Dr. McKenzie's naso-oral respirator and explained its use.

Dr. Worthington, of Clinton, read a paper on the beneficial result of "Cold Applications in Cases of Diphtheria." He reported a number of instances from his private practice, in which the use of cold applications had a most salutary and curative effect. The paper may be epitomized in the following deductions:—1. That diphtheria, like scarlatina, can be treated with less danger of a fatal result by the use of cold applications. 2. That full nourishment and tonics are necessary to counteract the prostrating effects of the disease. 3. That the inflammatory action in the larynx may be best controlled by cold externally to the throat and some atomized liquid inhaled by the patient. And lastly, that the temperature for the safety of the patient must be kept under 103° F. and that this can be best done by cold applications.

Dr. Stewart, of Brucefield, read a paper on a case of "Locomotor Ataxia," in which the sciatic nerve had been stretched, and beneficial results had followed, so far at least as the most painful symptoms were concerned. He exhibited the patient to the Association.

Dr. Avery, delegate from the Michigan State Board of Health was invited to a seat on the platform, as was also Dr. Fenwick of Montreal, President of the Dominion Medical Association. These gentlemen made a few remarks. Drs. Osler, Gardner and Shepherd, of Montreal were elected members of the Association by invitation.

Dr. Curry, Rockwood, read a paper on the "Science of Medicine."

Dr. Temple, of Toronto, read an interesting paper on "Lacerations of the Cervix Uteri, as treated by trachelorrhaphy." He gave the results of six cases, where the operation had been performed either by himself or with his assistance.

Dr. Powell, of Edgar, read a paper on the "Occurrence of Hemorrhage after Tonsillotomy."

Dr. Dupuis, of Kingston, read an able paper on "Dislocation of the Elbow-joint."

Dr. Smith, of Sparta, read a paper on "Alcohol in Disease." He deprecated its use in all cases, and claimed that its effects were invariably deleterious. In cases where stimulants might be considered necessary other agents such as ether, etc., might be used to accomplish the desired end.

Dr. McDonald made some remarks on the use of alcohol in disease, and also the treatment of epilepsy by bromide of zinc and other drugs.

The President, Dr. Covernton, found drop doses of Fowler's solution given with bromide of potassium, prevent the acne which sometimes follows the use of the latter medicine.

Dr. Oldright then read a paper on "Measurements in Surgical Practice."

Dr. Ryerson also read an interesting paper on "Adenoma of the Vault of the Pharynx."

Dr. Playter read an interesting paper on "Some Points in the Vital Statistics of Ontario."

The President said the Ontario Government could not at present give a sufficiently large grant until the public properly appreciated the importance of the question.

Dr. Canniff thought the Dominion Government should give a grant towards the collection of vital statistics, and it had in fact taken a step in this direction.

Dr. Pyne spoke on the question of insufficient remuneration awarded to medical men, and the public lack of recognition of their great services.

The President then extended a general invitation from Dr. O'Rielly to visit the Hospital the following day, after which an adjournment was made until ten o'clock to-morrow.

SECOND DAY.

The Association met at 10.30 a.m., the President in the chair. Dr. Palmer, of Toronto, read an interesting paper on the "Lighting of Public Schools," in which he showed that the sight of pupils might be permanently injured through the defective system of lighting.

Dr. McDonnell, of Brechin, read an excellent paper on "Muriate of Calcium as a Resolvent."

Dr. Holmes, Chatham, read a paper on "Trachelorrhaphy," with more especial reference to Dr. Emmett's treatment of the laceration of the cervix by stitching. Dr. Rosebrugh and others considered the cases of such lacerations more frequent than was generally supposed, as they were often mis-

taken for other complaints. Drs. Mullen, Hamilton; Curry, Rockwood; Clemesha, Port Hope, and others opposed the opinion that those lacerations were of frequent occurrence.

Dr. Ghent, of Priceville, read a paper on the "Specific Treatment of Diphtheria," recommending an application to the diphtheritic patch, by means of a silver tube of biborate of soda and sulphur, in proportion of about one to twelve parts, the applications being made every two or four hours, according to the severity of the disease. He also fumigated the room three times a day with sulphurous acid.

Dr. Stalker, of Harwich, questioned the value of the remedy recommended by Dr. Ghent.

Dr. McDonald, Hamilton, found favorable results follow the use of hot fomentations. Drs. Powell, White and others joined in the discussion. Dr. McKelcan also read a paper upon the same disease. He advocated the use of pot. permanganate two or three grains to the ounce of lime water, and given in tea-spoonful doses.

Dr. Riddell read an exhaustive paper on the "Duties of Coroners," referring to many points of interest relating to medical jurisprudence.

The Committee on Nominations reported, recommending the following elections for the year. The report was adopted.

President—Dr. Macdonald, Hamilton. 1st Vice-President, Dr. Stewart, Brucefield. 2nd Vice-President—Dr. D. Clark, Toronto. 3rd Vice-President—Dr. Dupuis, Kingston. 4th Vice-President—Dr. Harrison, Selkirk. General Secretary—Dr. White, Toronto. Treasurer—Dr. J. E. Graham, Toronto. Corresponding Secretaries—Drs. Wm. Graham, Brussels; Burt, Paris; Coburn, Oshawa; McIntosh, Vankleek Hill.

Committee on Credentials—Dr. Beeman, Centreville; Drs. Burns and Pyne, Toronto.

Committee on Public Health—Drs. Playter, Allison, Oldright, and Youmans.

Committee on Legislation—Drs. Spohn, Sloan, G. Wright, Covernton, Mullin and Macfarlane.

Committee on Publication—Drs. Cameron, Burns, and Fulton, with the Secretary and Treasurer.

Committee on By-laws—Drs. A. H. Wright, More, Tanner, Cotton, and Bowlby.

Committee on Medical Ethics—Drs. Ghent, O'Rielly, Carney, C. K. Clarke, and Sinclair.

Committee on Nominations—Drs. Burns, Fulton, Rosebrough, Yeomans, Hamilton, Stewart.

Dr. Fulton presented the Report of the Committee on Publication, which stated that the Committee had decided to hand over the papers unconditionally to the Toronto medical journals for publication in their columns from time to time during the year ; also that 500 copies of the Constitution and By-laws were printed and distributed to the members of the Association.

Dr. Fulton also presented the Report of the Committee on Medicine, Materia Medica and Physiology. The report contained an epitomized account of the progress in medicine during the year, and new remedies introduced and the result of their use.

Dr. Geikie read the report of the delegates to the International Medical Congress in London. The descriptions both of the proceedings at the meeting and the scenes and incidents of the metropolis were extremely interesting and graphic.

Dr. Rosebrough read the report on Ophthalmology and Otology.

Dr. Riddell read the Report of the Committee on Necrology, which was adopted, as were all the preceding.

After some discussion, on the motion of Dr. Bray, seconded by Dr. Knight, it was decided that Toronto be the next place of meeting of the Association.

The Treasurer's and Secretary's Reports were read and adopted.

Dr. Strange suggested the propriety of publishing the proceedings of the Association in book form, a copy to be given to each member of the Association.

Dr. White, the Secretary, coincided with the views of the last speaker, and stated that the cost of publication would not amount to more than \$150. After some discussion it was decided that the Committee on Publication be instructed to hand the papers over unconditionally to the medical journals for publication from time to time, and such papers as were not published to be returned to the authors on request.

A resolution was passed approving of the action of the Provincial Board of Health of Ontario in co-operating with the National, State and Local Boards of Health in the United States and in the Dominion of Canada in the attempt to prevent

the introduction and spread of smallpox by the inspection and vaccination of emigrants, and the disinfection of their baggage and clothing, and by notification to all boards interested of the entry or proposed entry within their jurisdiction of emigrants suspected of carrying with them the germs of any disease dangerous to the public health.

Dr. Canniff moved "That in the opinion of this Association the formation of a medical library and museum would prove beneficial to the profession of this province, and that the following committee be appointed to consider the feasibility of such a scheme :—Drs. Cameron, Holmes, Fulton, Reed, Davison, Powell, and the mover." Carried.

Dr. D. Clark moved, "That the Secretary, Dr. White, receive a gratuity of \$100 for his valuable services during the past year." Carried.

The President-elect, Dr. McDonald, was then installed and made an appropriate speech, thanking the Association for the honour conferred upon him, and prophesying a brilliant future for the organization.

The thanks of the Association were conveyed to Dr. Covernton, the past President, for the able manner in which he had discharged his duties. A vote of thanks was also awarded to the Medical Council for the use of their hall by the Association, and to the various railways and steamboat lines for courtesies and favours extended to members of the Association. The Association then adjourned to meet again on the first Wednesday in June, 1883.

There was quite a display of surgical instruments and a varied assortment of medicines in the hall, the following being the principal :—Dr. Thomas, representing Hazen Morse, Front-street East, had on exhibition sample bottles of Maltopepsyn and Hydroleine, which were furnished free to doctors, that they might test their value as remedial agents. Maltine and its combinations, manufactured by Reed & Carrick, New York, and Lactopeptine, manufactured by the New York Pharmacal Association, were exhibited by H. P. Gisborne, Canadian representative of the houses referred to. J. Steven's & Son, of Wellington-street, East, exhibited surgical instruments, etc. Potter's Electric Battery and the Student's Union Co-operative Association exhibits also were attractive features. Mr. E. B. Shuttleworth also exhibited samples of new remedies, pharmaceutical preparations and fluid extracts.

ONTARIO MEDICAL COUNCIL.

The regular annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario met at Toronto on the 13th ult. In the absence of the President, Dr. Bergin, the Registrar, Dr. Pyne presided. The minutes of the last meeting were read and confirmed.

Dr. Rosebrugh, of Hamilton, elected as the representative of Victoria College in place of the late Senator Brouse, presented his credentials and took his seat in the Council.

The election of officers was then proceeded with, with the following result:—President, Dr. Bray, Chatham; Vice-President, Dr. Geikie, Toronto; Registrar, Dr. R. A. Pyne; Treasurer, Dr. W. T. Aikins; Solicitor, D'Alton McCarthy, Q.C.

The President referred to the death of Senator Brouse, and on motion of Dr. Geikie, a committee was appointed to draft a suitable resolution in regard thereto.

On motion of Dr. Lavell, the following committee was appointed to strike the Standing Committees for the year:—Drs. Day, Geikie, Logan, Spragge, Edwards and Cranston.

After a brief consultation they reported as follows:—

Committee on Registration—Drs. Bergin, Rosebrugh, J. W. Wright, Vernon, Buchan, Grant.

Rules and Regulations—Drs. Rosebrugh, Husband, J. W. Wright, Spragge, and Grant.

Finance—Drs. Edwards, Allison, McCargow, Day, Henderson, and Douglas.

Printing—Drs. McCammon, Vernon, Burritt, Morden, and Day.

Education—Drs. Lavell, Geikie, McCammon, H. H. Wright, McDonald, Burritt, Logan, Morden, Williams, Burns, Cranston, and Spragge.

A number of petitions were received and referred to the various committees, some of them being from students who had failed to pass the examination in particular subjects. One was from the Mayor and other residents of Amherstburg, asking that a license or permit be granted to Dr. Daniel Pearson, who had been practising for thirty years, and who had previously practiced in the United States for ten years. Dr. Shepherd, of Port Elgin, also applied for registration, as having been a number of years in practice, and having a license from the Quebec Medical Board. A

female practitioner, Mrs. Weston, of Preston, also applied for a license.

A number of cases of prosecution for practicing medicine without a license have taken place during the last year, although no special detective was employed by the Council. Dr. Bray, the President, reported several cases in his district, nearly all of whom had been convicted.

The Registrar read the report of the Board of Examiners.

The meeting then adjourned until ten o'clock tomorrow.

June 14th, 1882.

The Council met at 10 o'clock a.m., the President in the chair.

Dr. Day gave notice of a motion "to define what should be considered residence at elections."

Dr. Lavell gave notice of a by-law providing that the assessment to be levied on each practitioner be \$1, and that the registrar be instructed to send out circulars giving notice of this assessment.

A letter was read from the solicitor of Mr. William Smith, formerly employed as a detective by the Council, stating his claim, and offering to refer it to arbitration.

The Registrar stated the agreement was that Mr. Smith should receive \$1,200 a year, on his producing certificates from magistrates that he had procured convictions to that amount. Certificates had been presented to the amount of \$675, and \$600 had been paid to Smith. Subsequently he had procured convictions to the amount of \$100. The Registrar, however, had discovered that in one case he had acted improperly, which he was advised invalidated the whole claim.

On motion of Dr. H. H. Wright a committee was appointed to investigate the matter.

Dr. Geikie presented the report of the committee appointed to draft a resolution with reference to the death of the late Senator Brouse, and moved its adoption. The following is the resolution:—

"That this Council learned with the sincerest regret the death of their late colleague, the Hon. Senator Brouse, and place on record the very high regard in which he has always been held by his associates. In the death of this gentleman the Council has lost an able associate and the profession of medicine one of its most distinguished members. We hereby tender to his bereaved

family our heartiest sympathy in their bereavement."

Dr. Lavell, in seconding the resolution, spoke feelingly of the loss which the profession and the Council had sustained.

The President mentioned the work which Dr. Brouse had done in the cause of sanitary science, and Dr. H. H. Wright gave a brief account of his career.

The resolution was carried by a standing vote, and was ordered to be engrossed and a copy sent to Dr. Brouse's family.

Dr. Wright presented the report of the Committee appointed to inquire into the claim of Wm. Smith, recommending that it be referred to the solicitor of the Council for further advice.

Dr. Macdonald moved that the Registrar be instructed to prepare a new register. The present one, he remarked, was now seven years old. After some discussion as to what the register should contain, the motion was carried, and Drs. H. H. Wright, Burns, and Geikie were appointed a Committee to assist the Registrar in the work.

The Treasurer, Dr. W. T. Aitkins, presented his annual report, which showed a balance in hand at last meeting of \$2,011.14; assessments, \$793.63; registration fees, \$1,384.75; fines, \$386.14; fees from candidates at professional examinations, \$2,540; total, \$7,015.66. The balance now in bank to the credit of the Council, after deducting all expenditures for the last fiscal year, is \$1,568.31. The Executive Committee which formerly entailed an annual expense of about \$500, had not met during the year, and the services of the detective, employed at a salary of \$1,200 per year, had been dispensed with, notwithstanding which the amount received from fines was in excess of that received last year. An increase in the assessment to provide for the increasing indebtedness of the college was recommended. The Report was referred to the Committee on Finance.

Dr. Day gave notice of motion, that the Treasurer's statement be printed and sent to every registered practitioner in Ontario.

The Council then adjourned.

June 15th, 1882.

The Council met at 10.30 a.m., and after routine went into Committee of the Whole on the report of the Committee appointed to wait upon the

Local Legislature for the purpose of procuring an Act to amend the Ontario Medical Act. The report stated that in consequence of a resolution now standing on the minutes of the proceedings of this Council, and which they believe to have been there by mistake they have been unable to proceed. At the last annual meeting of the Council it was decided to apply to the Local Legislature to have the Ontario Medical Act so amended as to re-adjust the representation of the profession and of the colleges at the Council. At the same meeting an amendment, directing the Committee to get the opinion of the Superior Court Judges upon the Act, was discussed, and, according to the minutes, carried. This resolution annulled the previous motion.

Dr. Day, who presented the report of the Committee, said he was certain that the resolution referred to did not carry.

Dr. Macdonald strongly opposed the report, and the advisability of going before the Legislature for any amendment.

Dr. Burns thought the Council should look at their duty to their constituents, and in this view there were unmistakeable signs of dissatisfaction among the profession on the question of representation.

Dr. Bray supported the report, contending that the present was the time for the profession to make itself felt.

Dr. Williams thought that the Council should be unanimous upon the nature of the changes they wanted.

Dr. Lavell pointed out that the present scheme of representation was the result of a compromise between the colleges and the different branches of the profession. He referred to the difficulty which would arise in classifying the colleges so as to show which should be entitled to representation. He suggested that any committee which might be appointed should report to the Council before taking any action.

Dr. Burritt thought that the Council should not be frightened out of going before the Legislature.

Dr. Geikie thought the Committee should go over the Act clause by clause, and see what amendments are required. The report was adopted.

The report of the Registration Committee, dealing with a number of applications for registration,

was received and adopted. The prayers of the petitioners were not granted.

In reference to the claim of William Smith, a letter was received from the solicitors advising the Council to ask for particulars.

Dr. Allison, seconded by Dr. Burns, moved a resolution having for its object the disposal of the present building in which the Council meets, as it was considered entirely unsuited for its present purposes. It was generally agreed that the building was not a suitable one for a college, and that it could be sold at a considerably higher price than the Council paid for it. A committee, consisting of the city members and Drs. Allison and Macdonald, was appointed with power to sell if they thought advisable, and also to enquire about a site for a new building. The Council then adjourned until 10 a.m. to-morrow.

June 16th, 1882.

The Council met at ten a.m. After routine, Dr. Edwards presented the report of the Finance Committee, which was adopted. The report showed that the arrears of fees due the Council were \$4,954, which are supposed to be collectable. The value of the building is from \$18,000 to \$20,000, and there is a mortgage of \$6,000 upon it. The expenses of the present session amount to \$1,985.

Dr. Macdonald brought before the Council a plan, proposed by Dr. Playter, for collecting disease statistics. It proposed that the Federal Government appoint for the Dominion 144 medical practitioners, to report every week upon the diseases most prevalent, their severity, etc., in their respective districts. Of these, 65 would be allotted to Ontario—one in each county town—and 28 others distributed in other towns and villages in the province. The observers were to be paid the sum of \$25 for filling in the 52 reports of the year. Dr. Macdonald moved and Dr. Burritt seconded a motion approving of the plan, which was carried.

Dr. Lavell presented the report of the Education Committee. Most of the petitions considered by the committee were refused, the principal exception being in the case of Mr. W. F. Peters, who failed by a very few marks in surgical anatomy last year, and had a large margin on other subjects, and who is now living at Michipicoton Island, which is so far from Toronto as to make it impracticable for him to attend the examination.

Several changes were made in the regulations governing the examination of students, the most important of which were a clause allowing candidates who had paid for a professional examination and failed to pass it, to go up for one subsequent examination without further fee; and an instruction to examiners to confine their questions to the text-books in common use, and in referring to diseases, surgical operations, etc., to use the names most commonly in use.

The following board of examiners was appointed:—Anatomy (descriptive), Dr. Fulton, Toronto; Medicine and Pathology, Dr. A. S. Oliver, Kingston; Midwifery, Dr. Burdett, Belleville; Physiology, Dr. Tye, Chatham; Surgery and Surgical Anatomy, Dr. Canniff, Toronto; Chemistry and Toxicology, Dr. Barrett, Toronto; Materia Medica and Botany, Dr. W. W. Dickson, Pembroke; Medical Jurisprudence and Sanitary Science, Dr. Nichol, Brantford Homœopathic examiner, Dr. G. E. Field, Woodstock.

The following were appointed as an Executive Committee:—The President, Vice-President of Council, and Dr. Henderson.

On motion of Dr. Lavell the Registrar was authorized to issue the annual announcement.

The Council then adjourned.

ONTARIO BOARD OF HEALTH.

The Provincial Board of Health met in Toronto on the 6th ult. Present:—Dr. W. Oldright, chairman, and Drs. C. W. Covernton, J. J. Cassidy, J. Rae, Oshawa, and Dr. P. H. Bryce, secretary. The visitors were Dr. John Avery, delegate from the Michigan State Board of Health, and Dr. J. E. White, Secretary of the Ontario Medical Association. The Minutes of the last meeting were read and adopted with slight change. A number of communications were read. One was from Dr. Moorhouse, calling attention to the nuisance caused by gardeners in this city who use, as a fertilizer, liquid night soil. A disease-report scheme was discussed, the object of the scheme being to obtain, if possible, weekly reports from doctors in different parts of Ontario containing first, a list of the cases attended by them, and the diseases treated, and second, the severity of the disease, and third, its prevalence. It was also agreed that a weekly compilation of the reports be made by the

Secretary of the Board, and that he communicate with medical men for the purpose of securing their co-operation in the scheme. The Secretary reported that he had received a quantity of fresh vaccine matter from the National Vaccine Establishment at Washington, to be supplied to provincial medical men at cost price. A diagram was exhibited, showing the effect that ozone—active oxygen—had upon certain diseases, both as to their frequency and severity. It was shown that an excess of ozone in the air decreased the frequency of cases of diarrhoea, while the maximum of cases of pneumonia, diphtheria, and other throat and lung diseases were shown to occur under such atmospheric conditions as showed an excess of ozone. This is entirely different from the opinion generally entertained in reference to diphtheria, which was supposed to be benefited by the presence of active oxygen in the air. The subject of the inspection of emigrants in order to guard against the introduction of smallpox and other contagious diseases was discussed, but was deferred till the next meeting.

It was moved by Dr. Covernton, seconded by Dr. Cassidy, "That it is desirable that a systematic system of sanitary supervision and inspection of public schools be established all over the Province of Ontario, and that efficiently to carry it out a local health officer should be appointed, whose duty should consist in preventing children who have been suffering from infectious diseases from attending school before the infectious period has passed; in visiting the houses of children absent from school in consequence of illness; and in making strict inquiries into the general sanitary condition of the respective families, and to see that through competent persons contagion should be sought out and destroyed in the house in which it originated." Carried.

It was moved by Dr. Cassidy, seconded by Dr. Covernton, "That this Board would express the opinion that the appointment of health officers by municipal councils should be confined to local medical men, who, from their professional training, are alone qualified to perform the work efficiently." Carried.

Selected Articles.

NEPHROTOMY AND NEPHRECTOMY.

BY J. KNOWSLEY THORNTON, M.B., C.M.

Surgeon to the Samaritan Hospital.

The pathological conditions of the kidney which may call for the interference of the surgeon are—calculus in the kidney or ureter; suppuration in the pelvis of the kidney, depending on the presence of calculus, and the obstruction it causes to the escape of the urine (calculus pyelitis); suppuration depending on scrofulous or tubercular disease (pyonephrosis); hydronephrosis, which may arise from several different causes, or be congenital, as I believe was the case in my first successful nephrectomy, performed on a child aged seven (*The Lancet*, June 5, 1880); loose or floating kidney; certain rare forms of cystic disease; and the more solid neoplasms. The surgical procedures which have been or are now employed for the relief of these conditions are—aspiration or tapping, which is of course only palliative; nephrotomy, that is, incision into the kidney; and nephrectomy, or the complete removal of the organ.

Lumbar section is much in favor with some surgeons; and as it is the most suitable operation for the class of cases first named in my list of pathological conditions, we will take it first. I have performed this operation three times, and all the patients have recovered. The first was a case of tubercular suppuration, and the patient derived immense relief from the operation; but a permanent fistula remained, and the other kidney becoming also affected, she eventually died of suppression of urine. The second was a case of one of the rarer forms of cystic disease in connection with the kidney. The cyst was opened and drained antiseptically, and the patient is now in good health. The third is the case of M.D., the young woman on whom I afterwards performed nephrectomy, and who has just gone home quite well. Those of you who were present at the nephrotomy in this case will remember that I made an incision in the right lumbar region, commencing at the centre of the last rib, and carried down somewhat obliquely to about the centre of the crest of the ilium, the outer border of the quadratus lumborum being thus exposed and forming a guide to the deeper parts of the incision. You will also remember how very free the hemorrhage was from a number of small vessels, and how it interfered with a good view of the deeper parts of the wound until it was restrained by pressure forceps. The patient was thin, but still the kidney was reached at some depth, and of course this would be enormously increased in a very stout person. I wish,

then, to direct your attention to the facts that the kidney is readily reached in this situation, but there is small hemorrhage, which may be of moment in a very weak patient; and that the space for examination of the kidney is not very large. The organ is reached at the farthest point from the vessels, and it is impossible to explore the whole course of the ureter.

The question in my case was, Is the suppuration due to calculus or tubercle? The answer was not given by the exploration I was able to make through the loin incision; there might have been a stone in the incision beyond my reach. There were no tubercular growths as in my first case. Had I made my exploration through the abdomen by an operation to be immediately discussed, I should have been able, before cutting into the kidney, to satisfy myself as to whether the obstruction was in the ureter, and in this particular case should have recognized the enormously and irregularly enlarged and hardened ureter as an indication of tubercle, and should have at once proceeded to remove the kidney. As it was, I could not feel certain as to the cause of the suppuration, and so determined to try the effect of free antiseptic drainage. The result was a partial improvement followed by relapse, and a month later I had to perform nephrectomy complicated by the presence of a putrid sinus in the loin. The hectic and exhausted condition of this patient before operation, gives a very fair sample of what one will usually have to face in performing nephrotomy or nephrectomy for suppurating kidney.

In thus calling your attention to the disadvantages of the lumbar incision, I must remind you that in my second case it would have been absolutely impossible to complete the operation through that incision. Some operators have found it necessary to resect a portion of the last rib—a proceeding which must be admitted to add enormously to the risk of nephrectomy. One surgeon has suggested that the rib could be sufficiently pushed or drawn aside; but with either of these aids it would have been absolutely impossible to remove the enormous mass (four pounds seven ounces), especially in such a very stout patient. The only cases in the future in which I would use the lumbar incision, are those in which there is little or no enlargement of the kidney. In short, I would restrict its use to the operation of nephro-lithotomy. The experience of Beck, Butlin, Morris, Haward, and others abundantly proves that there is a great future for this operation, and that when the kidney substance which is cut through in reaching the stone is fairly healthy, there is nothing to fear from the immediate hemorrhage, and but small risk of permanent urinary fistula. The abdominal methods would be quite unsuitable for this procedure, but experience alone can decide which method will be best when there is strong evidence

of calculus pyelitis. My own impression is that whenever the kidney is much distended it will be found that urinary fistula is likely to remain after the removal of the stone through the loin, and that it will become the rule to perform nephrectomy rather than nephro-lithotomy. In any case in which I had commenced with the loin incision, and then decided that it was better to perform nephrectomy, I should certainly complete the operation by that abdominal section which you have seen me use, and which I am now going to describe more in detail, merely using the previous loin wound for drainage, and of course suturing the greater portion of it.

We will now consider nephrectomy by abdominal section. There are two incisions, both of which I have tried. The one is made in the median line, to the left of the umbilicus, and extends for about an equal distance above and below it. By this incision the general peritoneal cavity is fully exposed, and the kidney is most conveniently approached through the inner layer of the meso-colon. It can, of course, be approached through the outer layer, but as the operation proceeds the colon will be constantly in the way of the surgeon; whereas, if through the inner layer, it will, as enucleation proceeds, shrink into its natural position and give no more trouble. When enucleating the right kidney, however, through the inner layer, one is exposed to much greater risk of hemorrhage, as pointed out by Langenbeck at the International Congress, because the vessels to the transverse colon pass chiefly through this inner layer. It might appear that the median incision would give one a more direct approach to the renal vessels; but this is not the case, or at least it is more than counterbalanced by the annoyance caused by the omentum and small intestines. The chief objection to the median incision is, however, the great exposure of the general cavity of the peritoneum and its contents.

The incision advocated by Langenbeck is made outside the rectus abdominis, and it is the one you have seen me use in both these successful cases. Admitting the advantage claimed by Langenbeck, when the right kidney is in question, I go much farther and claim for it such advantages over both the lumbar and median incisions that I believe it will, at no distant date, be *the incision* for nephrectomy, as completely as the median incision is *the incision* for ovariectomy and like operations. The following are its advantages: An almost bloodless incision through the abdominal parietes and peritoneum; a complete command of both kidney and ureter for thorough examination and diagnosis; a comparatively bloodless and safe operation, should complete nephrectomy be decided upon. The fact that the peritoneal cavity is opened is of little moment, for there is no general exposure of its contents, and with the most ordinary care no possibility of any blood or foreign matter passing

among the intestines; it is, in short, quite possible to make it practically an extra-peritoneal operation by having the inner edge of the parietal peritoneum and the inner edge of the incision through the meso-colon held together or temporarily secured by a few sutures. The renal vessels can be reached and secured with ease by merely pushing the finger through the cellular tissue between the peritoneum and the kidney, and this can be done before the kidney is enucleated, and the most important part of the operation is thus performed with comparatively trifling hemorrhage. Of course the amount of difficulty in both reaching the vessels and enucleating the kidney, will vary much according to the amount of adhesion between the peritoneum and capsule, and the kidney and the capsule respectively; but whether this be great or small, I am certain that it is both safer and easier to perform the enucleation with plenty of space, and distinctly seeing all one does, than through a deep and obscure opening like the loin incision. If there is much adhesion the peritoneum is sure to be torn and opened in many places, and there is much less risk when this is done openly and with proper sponging and with the possibility of effectually closing the openings made. Of course, all I say of these operations is said with the full understanding that they are to be performed with the strictest antiseptic precautions, and my recent experience shows that even with putrid pus in the kidney, and with a putrid loin sinus, the operation can still be made aseptic by the free use of tincture of iodine, and with great care in the final steps of enucleation of the kidney.

I have now to mention a proceeding which I believe I have been the first to introduce, and which I consider to be of the greatest consequence to the safety of the patient and the aseptic performance of the operation. I refer to the fixing of the bladder-end of the ureter outside the abdominal incision, so that the septic material it is certain to contain is not left deep in the recesses of the wound. I tie it as firmly as possible with strong silk and cut it off so as to leave only just enough stump to pass a pin through and keep it from slipping into the wound. I clean this stump well with iodine and pack it round with a little cotton squeezed out of tincture of iodine. By this method I have been able, in both cases you have seen, to avoid putrefaction in the early stages of the case; that is, until the peritoneum is well sealed. I think that the question of drainage in each of these operations must be decided at the time for each individual case. Whenever there is a loin opening, as in my first case, I should certainly use it, passing an india-rubber tube right through from the abdominal incision (as I did in that case), so that the wound could be at once flushed and washed out if any septic symptom appeared. In any case in which I felt sure of asep-
 sis,

I should not drain, as I am sure the peritoneal surfaces about the wound would rapidly remove (absorb) fluid effused, as was the case in my little girl, and in the last case you have seen.

To sum up, then, I would recommend that the lumbar incision be only used for cases in which there is a strong suspicion that a calculus is present, and that the operation will end in nephrolithotomy; and I should be disposed, in any case in which I had commenced by the lumbar incision, and then found it necessary to complete the nephrectomy, to do so by Langenbeck's incision, utilizing a portion of the already made lumbar incision for drainage, and closing the remainder. I would in all other cases, such as neoplasm of kidney, hydronephrosis, pyonephrosis, and floating kidney, operate by abdominal section, making the incision along the outer border of the rectus abdominis instead of in the median line.—*Medical Times and Gazette*.

MARTIN'S BANDAGE IN THE TREATMENT OF FRACTURE OF THE PATELLA.

Dr. Byrd, of Quincy, Ill., gives in the *Med. and Surg. Reporter*, the following history of a case:—

January 9th, 1882, I was called to see Henry Meyer, an athletic labourer, aged 28 years, who was said to have received a sprain of the knee. When I saw him, I found that, while out hunting, his foot had slipped, and in his endeavor to regain his equilibrium, the right patella was fractured at the junction of the middle and lower third. The fragments were separated sufficiently to admit the thumb being placed between them. There was considerable effusion into the joint, with great pain. Not being able to get a leather or shellac-cloth splint at the time, I took an inch-thick pine board, that would extend from the sub-gluteal fold to below the heel, and so shaped it that it was about as wide as the greatest diameter of the leg, except just opposite the joint, where I made projections, so that the bandage, passing around the limb and splint, would exert traction upon the fragments in such a manner as to draw them together (see the cut in Dr. Hamilton's "Fractures and Dislocations," sixth edition, p. 523) and not slip. The splint was well padded, so as to fit the limb comfortably, and the bandage was applied as on page quoted above; "a roller, made of unglazed cotton cloth, is then turned around the leg and splint to within about three inches of the knee, and another from the upper end of the splint, over the splint and thigh, to within three inches of the knee. While an assistant approximates the fragments with his fingers, the surgeon makes two or three turns with a third roller around the limb

and splint, close above the knee ; after which the roller descends below the knee, and an equal number of circular turns are made close below the lower fragment of the patella ; and finally, a succession of oblique and circular turns are made above and below the fragments, which turns are to approach each other in front until the whole of the patella is covered, the last turns being again circular. The dressing now being completed, the rollers are carefully stitched to the cover of the splint, through its whole length, on both sides, and the limb is left supported in the elevated position by a suspending apparatus, or by some other mode which will insure its maintenance." I quote the above for the reader to understand that all Dr. Hamilton's details were carried out, with the exception of the substitution of a pine board for a splint, instead of shellac cloth. This treatment was kept up for a week, but the effusion and swelling not diminishing, I applied a Martin's rubber bandage, instead of the cotton one, from the ankle to the gluteal fold, expecting to get absorption of the effused fluid, and also by the constant elastic pressure to overcome any tendency to spasms in the quadriceps muscle. I had intended to remove the fluid from within the joint, with the aspirator, before applying the bandage, but having removed the bandage from another patient just before calling to see this one, and not having the aspirator with me, I concluded to apply the bandage, as I had it with me, and if necessary aspirate the next day. When I came to see him the next day the swelling had subsided so much, and he was feeling so comfortable, that I decided not to aspirate. From this time on he made a speedy recovery. At the end of nine weeks I let him go upon his crutches, and to-day he walks well on the limb, although there is yet considerable stiffness of the joint. The union is so intimate that it is with the greatest difficulty that the site of the fracture can be made out.

I do not know but that the board splint could be replaced, with advantage to the patient, by one of shellac or plaster-of-paris, allowing the patient to go upon his crutches at once, applied to the posterior half of the leg, as suggested by Dr. Hamilton. The shellac, on account of its weight, would, of course, be the best. In using the india-rubber bandage it should be taken off at least once a day, and the limb washed, to clean off accumulated epithelial scales and perspiration ; the bandage should then be washed dry and re-applied. There can be but little doubt that a great deal if not the whole of the displacement of the fragments is owing to the effusion within the joint, and it would be a good and safe practice to aspire before applying the bandage ; for my views in regard to aspiration of joints I refer the reader to the Baltimore *Independent Practitioner* for Sept., 1820, or to a very valuable paper by Dr. Wm. Judkins, of Cincinnati, O., published in the *N. Y. Med. Record*, April 8, 1882.

PROFESSOR BILLROTH AND PIROGOFF'S ILLNESS.

Much difference of opinion and discussion has occurred in medical circles over the illness of the recently deceased famous Russian surgeon, Pirogoff. The discussion has arisen from the difference in opinion of Prof. Billroth and the attendant Russian surgeons. Prof. Billroth has recently written a letter to Dr. Wywodzow, in St. Petersburg, who had sent a portion of the tumor, from which Pirogoff suffered, to Vienna. I make a few abstracts from his letter.

"More than two-thirds of the sections taken from the tumor consist of a small-celled, vessel-rich, fibro-sarcomatous tissue ; upon one periphery of the section, there are, however, very distinct epithelial structures, and in one corner is a bit of exquisite epithelial-carcinoma with epithelial pearls ; the latter are apparently somewhat horny and possess a peculiar bright-brownish color ; whether this color was originally so, or perhaps has arisen from the employment of Peru balsam which I recommended to Pirogoff, I am not able to decide.

"From this discovery, it appears that my views of the case, as well as those of my Russian colleagues, were correct. When Pirogoff consulted me in Vienna, I had the impression that the disease had originally acted as a chronic inflammatory process in the alveolus of the last upper left molar tooth ; this tooth became loose and fell out. Then the chronic inflammatory, new formation grew forth, and took on gradually the character of an infiltrated sarcomatous epulis, as I have more frequently noticed in old people. In this stage, I saw Pirogoff. The regular tumor was free from epithelium ; the surface appeared to be granulating well, were tolerably firm, and bore no traces of destruction. The epithelium was not entirely destroyed in these places, but grew here and there, as it followed several islands of cicatricial tissue. In consequence, this epithelial growth had taken on a more proliferating and destructive character ; in this manner it resulted in the partial development of a genuine epithelial carcinoma. I should like to place the progress of carcinoma formation in parallelism with lupus and other chronic ulcers. The swollen lymphatic glands, which, as I hear, appeared later behind the angle of the lower jaw, were certainly the carcinoma of infection.

"However interesting and instructive the result of microscopic investigations in such cases may be, and however the etiology of the progress of the tumor may be anatomically illustrated, yet the diagnosis of carcinoma in the present case determined me not to operate.

"A man seventy years old, although still of most buoyant spirit, yet bearing in himself all signs of bodily marasmus, with cataract in both eyes, etc., had no prospect of surviving such an operation as

one would have been obliged to make, only to remain for a short time free from a recurrence of the disease. Yes, I declare to you, that if such a patient was both vigorous and twenty years younger than Pirogoff was, I would not operate upon him. My experience as a surgeon, now of thirty years' duration, has taught me that sarcomata and carcinomata, beginning entirely behind the upper jaw, are never capable of radical removal by operative procedure, even if one operates with some probability of his patient surviving the operation. Behind the upper jaw an operator is so hindered, partly technically, partly anatomically, that a clean extirpation is impossible, although he may be dealing with a very exceptional case of entirely encapsuled tumor.

"I am no longer the unterrified, bold operator as you knew me in Zürich. I lay before myself now, always, the question, Would you permit this operation to be performed upon yourself if you were in the patient's position? Then, one comes, in the course of years, to a certain resignation. With every year which fate yet gives me, shall I become more and more affected by bad results in our art."

"I should have blamed the surgeon who would have attempted an operation upon Pirogoff. So far as I myself was concerned, I knew I could accomplish no favorable result in his case; so I attempted, through encouragement, to lift up the psychical depression of the patient, and talk him over to patience, in order to deceive him as to the significance of his suffering. That is, indeed, all we are able to do in such cases. It is really perfectly natural that my views conflicted with those of my distinguished Russian colleagues, yet I have acted as, according to my experience, I held it my duty.

"If you wish to publish this letter I have no objections. I have withdrawn for ever from the literary stage at the command of surgery, and confine myself, in word and deed, to my students and patients, so long as it may yet be permitted me to work. With friendliest greetings,

"Your most obedient servant,

"DR. H. BILLROTH."

—(*Med. News Correspondent*).

MYOPIA IN FRANCE.—It is stated in the report of the committee, which was appointed some time ago by the French Government to inquire into the prevalence of short-sightedness amongst the youths at the great Government schools in France, that the cause of the infirmity is to be found in the fact that the school books are printed in type which is too finely cut, and further, that the custom of printing upon white paper is still more hurtful. They recommend, therefore, that the authorities should consider the advisability of substituting thicker characters in the books, and also printing in white letters upon tinted paper.—*Brit. Med. Journal*.

RIP VAN WINKLE, M.D.

[As *apropos* of some of the characters occasionally to be met with at Medical Association meetings, we republish the following humorous poem, written by Oliver Wendell Holmes, M.D., LL.D., and recited by him as an after-dinner prescription, at the Massachusetts Medical Society, several years ago.]—Ed. LANCET.

CANTO FIRST.

Old Rip Van Winkle had a grandson, Rip,
Of the paternal block a genuine chip;
A lazy, sleepy, curious kind of chap;
He, like his grand-sire, took a mighty nap,
Whereof the story I propose to tell
In two brief cantos, if you listen well.

The times were hard when Rip to manhood grew;
They always will be when there's work to do;
He tried at farming—found it rather slow—
And then at teaching—what he didn't know;
Then took to hanging round the tavern bars,
To frequent toddies and long-nine cigars;
Till Dame Van Winkle, out of patience, vexed
With preaching homilies, having for their text
A mop, a broomstick—ought that might avail
To point a moral or adorn a tale.
Exclaimed—"I have it! Now then Mr. V.!
He's good for something—make him an M. D.!"

The die was cast; the youngster was content;
They packed his shirts and stockings, and he went.
How hard he studied it were vain to tell—
He drowsed through Wistar, nodded every Bell,
Slept sound with Cooper, snored aloud on Good;
Heard heaps of lectures—doubtless understood—
A constant listner, for he did not fail
To carve his name on every bench and rail.
Months grew to years; at last he counted three;
And Rip Van Winkle found himself M. D.
Illustrious title! in a guilded frame
He set the sheepskin with his Latin name!
RIPUM VAN WINKLUM, QUEM WE—SCIMUS—know
IDONEUM ESSE—to do so and so;
He hired an office; soon its walls displayed
His new diploma and his stock in trade,
A mighty arsenal to subdue disease
Of various names, whereof I mention these:

Lancets and bougies, great and little squirt,
Rhubarb and Senna, Snakeroot, Thoroughwort,
Ant. Tart., Vin., Colch., Pil. Colocynth. and Black Drop,
Tinctures of Opium, Gentian, Henbane, Hop,
Pulv. Ipecacuanhæ, which for lack
Of breath to utter, men call Ipecac,
Camphor and Kino, Turpentine, Tolu,
Cubebs, "Copeevy," Vitriol—white and blue,
Fennel and Flaxseed, Slippery Elm and Squill,
And roots of Sassafras and "Sarsap'ril,"
Brandy—for colics—Pinkroot, death on worms—
Valerian, calmer of hysterical squirms,
Musk, Assafetida, the resinous gum
Named from its odor—well, it does smell some—
Jalap, that works not wisely, but too well,
Ten pounds of bark and six of Calomel.

For outward griefs he had an ample store,
Some twenty jars and gallipots, or more;
Ceratum simplex—housewives oft compile
The same at home, and call it "wax and ile;"
Unguentum Resinosum—change its name,
The "drawing salve" of many an ancient dame;
Argenti Nitras, also Spanish flies,
Whose virtue makes the water-bladders rise—
(Some say that spread upon a toper's skin
They draw no water, only rum or gin)—

Leeches, sweet vermin ! don't they charm the sick ?
 And Sticking-plaster—how it hates to stick !
Emplastrum Ferri—ditto *Picis*, Pitch ;
 Washes and Powders, Brimstone for the—which,
Scabies or *Psora*, is thy chosen name
 Since Hahnemann's goosequill scratch'd thee into fame,
 Proved thee the source of every nameless ill,
 Whose sole specific is a moonshine pill,
 Till saucy science, with a quiet grin,
 Held up the *Acarus*, crawling on a pin ?
 —Mountains have labored and have brought forth mice :
 The Dutchman's theory hatched a brood of—twice
 I've well nigh said them—words unfitting quite
 For these fair precincts and for ears polite.
 The surest foot may chance at last to slip,
 And so at length it proved with Dr. Rip.
 One full sized bottle stood upon the shelf
 Which held the medicine he took himself ;
 Whate'er the reason, it must be confessed
 He filled that bottle oftener than the rest ;
 What drug it held I don't presume to know—
 The gilded label said "Elixir Pro."

One day the Doctor found the bottle full,
 And, being thirsty, took a vigorous pull,
 Put back the "Elixir" where 'twas always found,
 And had old Dobbin saddled and brought round.
 —You know these old-time rhubarb-colored nags
 That carried Doctors and their saddle-bags ;
 Sagacious beasts ! they stopped at every place
 Where blinds were shut—knew every patient's case—
 Looked up and thought—the baby's in a fit—
That won't last long—he'll soon be through with it ;
 But shook their heads before the knocked door
 Where some old lady told the story o'er
 Whose endless stream of tribulation flows
 For gastric griefs and peristaltic woes.

What jack o'lantern led him from his way,
 And where it led him, it were hard to say ;
 Enough that wandering many a weary mile
 Through paths the mountain sheep trod single file,
 O'ercome by feelings such as patients know
 Who dose too freely with "Elixir Pro,"
 He tumbled—dismounted, slightly in a heap,
 And lay, promiscuous, lapped in balmy sleep.

Night followed night, and day succeeded day,
 But snoring still the slumbering Doctor lay.
 Poor Dobbin, starving, thought upon his stall,
 And straggled homeward, saddle-bags and all ;
 The village people hunted all around,
 But Rip was missing—never could be found.
 "Drowned," they guessed ;—for more than half a year
 The pouts and eels *did* taste uncommon queer ;
 Some said of apple-brandy—other some
 Found a strong flavor of New England rum.

—Why can't a fellow hear the fine things said
 About a fellow when a fellow's dead ?
 The best of doctors—so the press declared—
 A public blessing while his life was spared,
 True to his country, bounteous to the poor,
 In all things temperate, sober, just and pure ;
 The best of husbands ! echoed Mrs. Van,
 And set her cap to catch another man.

—So ends this Canto—if it's *quantum suff*,
 We'll just stop here and say we've had enough,
 And leave poor Rip to sleep for thirty years ;
 I'll grind the organ—if you'll lend your ears
 To hear my second Canto after that
 We'll send around the monkey with the hat.

CANTO SECOND.

So thirty years had past—but not a word
 In all that time of Rip was ever heard ;
 The world wagged on—it never does go back—
 The widow Van was now the widow Mac—
 France was an Empire—Andrew J. was dead,
 And Abraham L. was reigning in his stead,
 Four murderous years had passed in savage strife,
 Yet still the rebel held his bloody knife.
 At last one morning—who forgets the day
 When the black cloud of war dissolved away ;
 The joyous tidings spread o'er land and sea,
 Rebellion done for ! Grant has captured Lee !
 Up every flagstaff sprang the Stars and Stripes—
 Out rushed the Extras wild with mammoth types—
 Down went the laborer's hod, the schoolboy's book—
 "Hooraw !" he cried—"the rebel army's took !"
 Ah ! what a time ! the folks all mad with joy :
 Each fond, pale mother thinking of her boy ;
 Old gray-haired fathers meeting—Have you heard ?
 And then a choke—and not another word ;
 Sisters all smiling—maidens, not less dear,
 In trembling poise between a smile and tear ;
 Poor Bridget thinking how she'll stuff the plums
 In that big cake for Johnny when he comes ;
 Cripples afoot—rheumatics on the jump,
 Old girls so loving they could hug the pump,
 Guns going bang ! from every fort and ship—
 They banged so loud at last they wakened Rip.

I spare the picture, how a man appears
 Who's been asleep a score or two of years ;
 You all have seen it to perfection done
 By Joe Van Wink—I mean Rip Jefferson.
 Well, so it was—old Rip at last came back,
 Claimed his old wife—the present widow Mac—
 Had his old sign regilded, and began
 To practice physic on the same old plan.

Some weeks went by—it was not long to wait—
 And "please to call" grew frequent on the slate.
 He had, in fact, an ancient mildewed air,
 A long grey beard, a plenteous lack of hair—
 The musty look that always recommends
 Your good old Doctor to his ailing friends.
 —Talk of your science ! after all is said
 There's nothing like a bald and shiny head—
 Age lends the graces that are sure to please,
 Folks wont their Doctors mouldy, like their cheese.

So Rip began to look at people's tongues
 And thump their briskets (called it "sound their lungs"),
 Brushed up his knowledge smartly as he could,
 Read in old Cullen and in Doctor Good.
 The town was healthy ; for a month or two
 He gave the sexton very little work to do.

About the time dogday heats begin,
 Measles and mumps and mulligrubs sets in ;
 With autumn evenings dysentery came,
 And dusky typhoid lit his smouldering flame ;
 The blacksmith ailed—the carpenter was down,
 And half the children sickened in the town.
 The sexton's face grew shorter than before—
 The sexton's wife a brand new bonnet wore—
 Things looked quite serious—Death had got a grip
 On old and young, in spite of Dr. Rip.

And now the Squire was taken with a chill—
 Wife gave "hot drops"—at night an Indian pill ;
 Next morning, feverish—bedtime, getting worse,
 Out of his head—began to rave and curse ;
 The Doctor sent for—double quick he came :
Ant. Tart. gran. duo, and repeat the same

If no *et cetera*. Third day—nothing new ;
Percussed his thorax—set him cussing, too—
Lung-fever threatening—something of the sort—
Out with the lancet—let him bleed—a quart—
Ten leeches next—then blister to his side ;
Ten grains of calomel—just then he died.

The Deacon next required the Doctor's care—
Took cold by sitting in a draft of air—
Pains in the back, but what the matter is
Not quite so clear—wife calls it "rheumatiz."
Rubs back with flannel—gives him something hot—
"Ah!" says the Deacon, "that goes *nigh* the spot."
Next day a *rigor*—run, my little man,
And say the Deacon sends for Dr. Van.
The Doctor came—percussion as before,
Thumping and banging till his ribs were sore—
"Right side the flattest!"—then more vigorous raps—
Fever—that's certain—pleurisy, perhaps.
A quart of blood will ease the pain, no doubt,
Ten leeches next will help to suck it out,
Then clap a blister on the painful part—
But first two grains of *Antimonium Tart.*
Last, with a dose of cleansing calomel
Unload the portal system—that sounds well!

But when the self-same remedies were tried,
As all the village knew, the Squire had died ;
The neighbors hinted—"this will never do,
He's killed the Squire—he'll kill the Deacon too."

—Now when a doctor's patients are perplexed,
A *consultation* comes in order next—
You know what that is? In a certain place
Meet certain doctors to discuss a case
And other matters, such as weather, crops,
Potatoes, pumpkins, lager beer and hops.
For what's the use?—there's little to be said,
Nine times in ten your man's as good as dead—
At best a talk (the secret to disclose)
Where three men guess and *sometimes* one man knows.

The counsel summoned came without delay—
Young Doctor Green and shrewd old Doctor Gray—
They heard the story—"Bled!" says Doctor Green,
"That's downright murder! cut his throat, you mean!
Leeches! the reptiles! Why, for pity's sake,
Not try an adder or a rattlesnake?
Blisters! Why bless you, they're against the law—
It's rank assault and battery if they draw!
Tartate of Antimony! shade of Luke,
Stomachs turn pale at thought of such rebuke!
The portal system! What's the man about?
Unload your nonsense! Calomel's played out!
You've been asleep—you'd better sleep away
Till some one calls you!"—

"Stop!" says Doctor Gray—
"The story is you slept for thirty years;
With brother Green, I own that it appears,
You must have slumbered most amazing sound;
But sleep once more till thirty years come round,
You'll find the lancet in its honored place,
Leeches and blisters rescued from disgrace,
Your drugs redeemed from fashion's passing scorn,
And counted safe to give to babes unborn."

Poor sleepy Rip, M.M.S.S., M.D.,
A puzzled, serious, saddened man was he;
Home from the Deacon's house he plodded slow,
And filled one bumper of "Elixir Pro."
"Good bye," he faltered, Mrs. Van, my dear!
I'm going to sleep, but wake me once a year;

I don't like bleaching in the frost and dew,
I'll take the barn, if all the same to you.
Just once a year—remember, no mistake!
Cry "Rip Van Winkle! time for you to wake!
Watch for the week in May when lilacs blow,
For then the Doctors meet, and I must go."

—Just once a year the Doctor's worthy dame
Goes to the barn and shouts her husband's name.
"Come, Rip Van Winkle!" (giving him a shake)
Lilacs in blossom! 'tis the month of May—
The Doctors' meeting is this blessed day,
And come what will, you know I heard you swear
You'd never miss it, but be always there!"

And so it is, as every year comes round
Old Rip Van Winkle here is always found.
You'll quickly know him by his mildewed air
The hayseed sprinkled through his scanty hair,
The lichens growing on his rusty suit—
I've seen a toadstool sprouting on his boot—
—Who says I lie? Does any man presume—
Toadstool? No matter—call it a mushroom.
Where is his seat? He moves it every year;
But look, you'll find him—he is always here—
Perhaps you'll track him by a whiff you know—
A certain flavor of "Elixir Pro."

Now, then, I give you—as you seem to think
We can drink healths without a drop to drink—
Health to the mighty sleeper—long live he!
Our brother Rip, M.M.S.S., M.D.!

COMPLETE PROCIDENTIA OF THE GRAVID UTERUS.

Dr. Shimoner (*Med. and Surg. Reporter*) reports the following case:—

A lady, about thirty-four years of age, primipara, enjoyed fair health before pregnancy; was married two years ago. I first saw her on the 27th of September last, on account of inability to micturate, complaining of much pain in the abdomen, and unable to keep the erect posture. Upon examination I discovered an enlargement of the abdomen. Proceeding to draw off her urine, I, to my great surprise, felt a large tumor between her thighs, which, upon closer inspection, proved to be the pregnant uterus prolapsed. It protruded about six inches, was about two inches across the os, and about five inches at the fundus. With little difficulty I replaced it, in about ten minutes, after which she got up and passed considerable water, without any difficulty, and felt well till the uterus again prolapsed. From that time up to her labor I replaced the womb five times; at one time it prolapsed down to the knees, carrying down the vagina and bladder. I tried to keep her in bed, but she would get up, in spite of all I would say; would do her housework, running up and down a flight of stairs.

[Dr. Ross, of this city, reported a similar case in a recent number of the *Canadian Journal Medical Science*.]

MALIGNANT DISEASE VERSUS SYPHILIS.—Dr. Patterson, of Glasgow, (*British Medical Journal*), writes as follows regarding Malignant Diseases vs. Syphilis:—Every surgeon, I am sure, reads with pleasure and profit anything from the pen of Mr. Jonathan Hutchinson. In the *Journal* of March 4th he refers to the clinical differences in character of malignant disease, according to its seat. Referring to certain cases of cancer of the skin of the trunk, it is stated that "In all, the ulceration progressed slowly during many years, caused but little pain, and produced no gland disease." Further on: "The disease of which I speak is most intractable, and, as far as I have observed, recurs immediately after removal." Reference is next made to an interesting case, in which Mr. Hutchinson twice removed the ulcer by the knife, and three or four times by caustic, but without benefit. "As soon as the sore was nearly healed, it recurred."

May a provincial surgeon be permitted to give a case in many respects parallel? Some years ago, a man aged 45, suffering from epithelial cancer of the scrotum, sent for an eminent surgeon, for the purpose of having it removed. The operation was well performed. No one who saw the case had the slightest misgiving regarding its nature, but, as a formal matter, the diseased structure was handed to a practised microscopist in the neighbourhood, who stated that it was epithelioma, without doubt. When nearly healed, it recurred, and was removed again, only to begin to spread when almost completely well. A third time it was taken away, with a like result. At the fourth operation, the testicle, which now appeared to be implicated superficially, was removed. When cicatrisation was all but perfect, the surgeon left town for his holidays, and shortly afterwards the patient's medical attendant requested me to perform the fifth operation, as the disease was spreading again. Having the history of the case before me, in a hopeless, half-hearted sort of way I cleared away the diseased tissues as carefully and completely as possible with the knife, and watched the healing process with much interest. Matters progressed very favourably until the healing line was reached, when once more the ulceration began. Such conduct in a chimney-sweeper's cancer appeared to me unique. I saw that operating again was useless, and I stood pondering at the bedside, my eyes rested on the shining bald head of the patient. As a random shot, the question was put as to when his hair first came out. He said his hair began to fall soon after he joined the service, more than twenty years ago. The answer gave the clue. Iodide of potassium was prescribed, when the wound rapidly and perfectly healed, and has so remained.

Last year a lady, aged 60, came to consult me regarding an ulcer on the left side of her nose. She had been recommended by her medical at-

tendant, whose card she brought, to see me regarding removal by operation. The sore, she said, began about two years ago, as a small scab or flattened wart, and continued to increase in size slowly and without pain since that time. The ulcer was now about five-eighths of an inch in length by half an inch in breadth, throwing out little discharge, and surrounded by an elevated, clear, glistening border. As she was accompanied by a friend, few questions were asked, and I simply stated that it might be prudent to defer operative interference in the meantime. The patient was given a prescription for tertiary syphilis, requested to use the medicine for six weeks, and then return. She did so, and the sore was completely healed. This was apparently a small rodent ulcer, with a syphilitic origin. We are, probably, yet far from thoroughly understanding the multifarious ramifications of syphilis.

QUININE IN THE TREATMENT OF CHOLERA INFANTUM.—The mortality reports among infants and young children are, in most parts of the country, greatly swelled during the summer months; and the greatest factor in producing this increase is what is commonly known as cholera infantum. Most parts of the country are particularly subject to it, while few localities enjoy an absolute immunity from it. With these facts so well known to the profession at large, comes the surprising statement of Dr. Otis F. Manson, of Richmond, Va., (*Transactions of the Medical Society of Virginia*, 1881): that he has not lost a case of cholera infantum since 1846. While attending a case of the disease at that time in a six months old child, he conceived the idea that it was caused by malaria; and venturing to give quinine, was gratified to obtain almost immediate relief in an apparently hopeless case. Since that time he has rescued large numbers of children suffering from this rapidly fatal disease, by the same means. He considers it a variety of malarial fever, and unhesitatingly says that the general adoption of his method will greatly diminish its mortality. Being called to a patient early, he administers from one-third to one-half a grain of calomel, with a few grains of sugar, on the tongue every half hour or hour, until the presence of bile in the alvine evacuations is evident. Gastric irritability, cold extremities, and heat about the head are to be met respectively by sinapisms, warm pediluvia, and cold applications. For delirium, coma, and convulsions the careful use of the cold douche is advised. Cold water, powdered ice, cool lime-water and milk, etc., are given to allay thirst; and small enemata of laudanum are resorted to, to control excessive vomiting and purging. Along with all this comes the main feature of the treatment, the administration of quinine, which is to be postponed until late at night unless the case is urgent. If called to a case

in the evening he waits until midnight and then gives to a child six months old and under, one grain of quinine every three or four hours until the pulse and temperature begin to fall. For a child one year old two grains are to be given. After the fever has subsided, the quinine, for the day, is to be suspended to commence again at midnight. Opium may be mixed with the minute doses of calomel, which should be continued until bile is clearly evident in the stools.

In the same volume of "Transactions" the same author, in his exhaustive paper on "The Physiological and Therapeutic Action of the Sulphate of Quinine," says:—"In cholera infantum I have witnessed the most beneficial effects from the employment of the sulphate of quinine. I was first led to use it in this fatal malady from observing the unequal distribution of animal heat to be discerned in the majority of cases, the strong tendency to congestion of the brain in the worst grades of the affection, and its simultaneous appearance and disappearance with malarial fever, etc. Given in sedative doses, I have not only seen these symptoms promptly removed, but also have generally observed the vomiting and purging to cease. I have seen it rescue cases in the last stages of the malady, when the extremities were cold and the patient in profound coma. Did the limits of this paper admit, I could relate almost miraculous recoveries from the use of the remedy in this disease, in apparently hopeless conditions. In cholera infantum I usually prescribe it in doses of one to three grains (carefully watching its effects lest sedative action might transcend the desirable degree) and repeating the doses every two or three hours, according to circumstances. In the chronic diarrhoea following attacks of cholera infantum, I usually employ it in small doses in combination with tannin and subnitrate of bismuth."—*Obstetric Gazette*.

THE PHYSIOLOGICAL ACTION OF BLOOD-LETTING.

—The unquestionable effect of local depletion in relieving some forms of inflammation appears to have been confirmed and explained by the recent researches of Dr. Genzmer, of Halle *Centr. f. d. Med. Wiss.*, April 1, 1882). This observer has found that when inflammation has been set up in the web of the frog's foot in the usual way—say by means of a hot wire or by caustics—and the process is watched under the microscope, it is possible to remove the stasis, to empty the blocked vessels, and so far to relieve the inflammation by applying a leech to the limb of the animal between the lesion and the heart. The actual phenomena attending the resolution of the inflammatory process prove, however, to be the very opposite of what might have been expected. Instead of producing anæmia of the affected area, leeching leads to hyperæmia of the part by drawing the blood from the blocked vessels, and allowing a full and

rapid stream to flow once more through them. Thus the leucocytes, clinging to the walls previous to diapedesis, are swept away in the blood-current; and one of the elements of inflammation is rapidly removed. But the abstraction of blood causes more than simple resolution. It is manifest that the free influx of blood into the inflamed area—that is, the hyperæmia—must restore the nutrition of the part, the reduction of which constitutes another of the factors of inflammation. Whether or not the leucocytes which may have already escaped from the circulation into the tissues pass back into the vessels, Dr. Genzmer is unable to say. Results similar in kind, but less marked in degree, followed scarification, instead of leeching, between the inflammatory focus and the heart. Distant venesection produced a decidedly less distinct influence. The results of these observations are decidedly valuable, but their importance must not be exaggerated. In the first place, as Dr. Genzmer remarks, they account for the effect of leeching *above* the seat of inflammation, not *at* or *over* it; secondly, they cannot be said to apply to venesection in visceral inflammations; and, thirdly, they do not explain the action of leeching or of venesection in the cases where these measures are clinically practised with most success—for example, in cardiac distress or in uræmia. It is possible that the antiphlogistic action of a poultice in inflammation may be the same as the local effect of leeching which has just been described, namely, the reduction of stasis, and the promotion of a free flow of blood through the damaged tissues.—*Med. Times and Gazette*, May 13, 1882.

A NEW VESICANT.—Dr. José Armengue, of Barcelona, has lately brought to the notice of the profession a new vesicant, which in many respects would appear to be far superior to cantharides. The new material is derived from the *Ænas afer*, a coleopterous insect, which at certain seasons of the year appears in enormous quantities in many parts of Spain. From experiments which Professor Armengue has instituted on his own person, and on that of several medical students, he is led to claim for the *Ænas afer* as a vesicant the following advantages over cantharides: it is cheaper; it acts without appreciable pain; it is equally powerful; and it does not, so far as his experiments have yet shown, affect the genito-urinary system. If its non-inflammatory action can be established by further experiment, it is probable that the *Ænas afer* will be a valuable addition to the materia medica.—*Brit. Med. Journal*.

LEMONADE IRON.—The following prescription is recommended by Wm. Godell:

R. Tincturæ Ferri Chloridi, . . . fʒiv.
Acidi Phosphorici diluti, . . . fʒvj.
Spiritus Limonis, fʒij.
Syrupum, ad fʒvi.—M.

Sig. A dessertspoonful, in water, after meals.

NEW METHOD OF CURING HYDROCELE.—(Escher. in *Centralblatt für Chirurgie*).—This new method of treatment consists in the introduction of a bougie into the sac after the latter has been punctured and evacuated in the usual manner. In the case of children or young persons the bougie (1-10th inch in diameter) is introduced to a depth of four or six inches, and remains in the sac from one to 12 hours. In adults the bougie may be passed in to a depth of 12 inches, and be retained 24 or even 30 hours. When reaction has thus been ensured, the bougie is removed, and the inflammation treated by rest, compresses, etc., according to the degree of its severity. This new method has been tried in 250 cases. It is said never to have yet failed to cure, and that recurrence is rare.—*Edin. Med. Fl.*

BORACIC ACID IN OTORRHOEA.—Dr. Charles D. Turnbull (*Medical and Surgical Reporter*, May 13, 1882,) claims that boracic acid, well powdered and "bolted," filled into the meatus, previously carefully cleaned through the speculum, and packed layer upon layer by gradually withdrawing the speculum till it reaches the mouth of the meatus, is almost a specific for otorrhœa, as he has cured every case of the hundreds he has treated and kept records of for the past three years. If the discharge ceases and leaves a hardened mass of discharge and powder filling the meatus, it must not be removed by force or syringing, but must be softened by instillation of warm fluid cosmoline. As the mass softens it may be delicately picked loose or blown out of the meatus by the rubber bag of a Politzer's air douche.—*Med. Review*.

An Irishwoman, needing some silk and some tape, sent her husband for them. The silk was shown, but the buyer thought the price too great. The clerk explained that all silk goods were dear, owing to some disease at this time prevailing among the silk-worms. The tape was next examined, and Mr. Irishman thought that a little stiff, too, as to price. "And, indade, sir," says he, "is there likewise a dezase prevailin' among the tape-worms?"

ROGERS ON ETHNOLOGY.—The poet Rogers, often related, post-prandially, the following anecdote: "An Englishman and a Frenchman fought a duel in a darkened room. The Englishman, unwilling to take the life of his antagonist, generously fired up the chimney, and—*brought down his antagonist*." "When," said he, "I relate this anecdote in Paris, I make the *Englishman* go up the chimney."

THE LAW OF LIFE.—The law of life in a complex animal organism is local autonomy, with universal sufferage; the individual cell being the citizen of a federal republic; the various departments being distributed among the different viscera, its senate and legislature in the nervous centres, the council of which is under the dome that crowns the grand structure.—*O. W. Holmes*.

A SCIENTIFIC SMUGGLER.—The Berlin *Montagsblatt* tells this story: In 1805 Humboldt and Guy Lussac were in Paris, engaged in experiments on the compression of air. The two scientists found themselves in need of a large number of glass tubes. These were exceedingly dear in France at the time, and the rate of import was something alarming. Humboldt sent to Germany for the needed articles, and gave directions that the manufacturer should seal up the tubes at both ends, and put a label upon each tube with the words *Deutsche Luft* ("German air"). The air of Germany was an article upon which there was no duty, and the tubes were passed by the custom officers without any demand, and arrived free of duty in the hands of the two experimenters.—*Boston Four. of Chem.*

SUBCUTANEOUS INJECTION OF ETHER IN PNEUMONIA.—From experience of 14 cases Dr. Barth (*Lyon Méd.*) strongly advocates the subcutaneous injection of about one gramme of ether in adynamic pneumonia. Almost instantly respiration becomes easier, pulse gains in strength and fulness, while the color of the face becomes more natural. In two or three minutes the ethereal odor is noticed in the breath, showing that the volatile liquid has reached the air passages. It is necessary to use the injection at least twice a day, and in severe cases four doses may be thus administered in 24 hours without inconvenience. Dr. Barth has not exceeded this dose, nor has he experienced any trouble from the punctures in the way of serious irritation.—*Glasgow Med. Jour.*, April.

CEREBRAL LESIONS IN SYPHILIS.—Dr. McCall Anderson exhibited before the Glasgow Pathological and Clinical Society a man, aged forty-nine. Twenty-four years ago the patient had syphilis. About fourteen years ago, after an attack of rheumatic fever, the patient had an attack of paralysis on both sides of the body—less severe, however, on the right than on the left. His recovery was speedy but never complete, slight rigidity remaining on the right side and some numbness on the left. These symptoms were aggravated after a second paralytic seizure about two years ago, and only began to disappear when the patient was put on antisyphilitic treatment. At the commencement of the first attack there was temporary unconsciousness. For the last three years there had also been a marked tendency to sweating on the left side of the face. Dr. Anderson's diagnosis was a lesion of the motor tract of the brain of the left side, and of the sensory tract of the right side, the degeneration descending to the lateral columns of the cord. The only treatment employed was the inunction of mercurial ointment, which rapidly produced such an amelioration of symptoms that the patient left the hospital.—*British Medical Journal*.

"DIGITATED STOCKINGS."—We are inclined to think that digitated stockings—that is, stockings with a stall for each toe—would conduce much for comfort, and spare many persons who now suffer from the development of soft corns between the toes, a serious trouble. They would also prove more cleanly than the stockings in common use, because they would naturally absorb and remove the acrid moisture which accumulates between the toes, and which is the general cause of offensive odors from the feet. They will, moreover, give the foot better play, allowing its phalanges greater freedom of action. And, lastly, a well-fitted digitated sock or stocking will remove a mass of material from the toe of the boot, and at the same time give increased breadth and space for expansion across the base of the toes. The new stockings, supposing them to be well cut and fitted, possess many advantages.—*The Lancet*.

THE ABORTIVE TREATMENT OF BUBOES.—Dr. M. K. Taylor, Assistant-Surgeon, United States Army, describes (*American Journal of Medical Sciences*) a very successful method of treating buboes, adopted by himself. When the glands have reached a moderately large size, he freezes the surface with ether, seizes the gland between the fingers and injects about twenty minims of a carbolic acid solution (gr. iv. to 3j.). Pain and soreness leave very soon, and the patients are generally able to resume work within three or four days. Dr. Taylor has tested his method on as many as 150 cases. He has used it successfully also in non-specific enlargement of cervical glands.

SUCCESSFUL GASTROTOMY FOR CANCER OF THE ŒSOPHAGUS.—At the April meeting of the Medical Society of London, Mr. T. Bryant reported a case of an old gentleman, 65 years of age, who had been sick for several months with cancerous stricture of the Œsophagus, and unable to swallow anything but milk, in whom gastrotomy was successfully performed on the plan of Mr. House. In the operation, which he divides into two stages, he prefers to puncture the stomach with a small tenotome, making an aperture only large enough to admit a No. 10 catheter. He recommended the performance of the operation as soon as there is difficulty in swallowing solid food, as it retards the progress of the disease and saves much misery to the patient.—*Lancet*.

THE SAFEST ANÆSTHETIC KNOWN.—Dr. Richardson says that Methyline bichloride, ten fluid drachms, and absolute methylic alcohol, six fluid drachms, constitute the safest known anæsthetic when the methylic alcohol is absolutely pure.—*Lancet*.

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.—The London *Medical Times and Gazette* says: Dr. Haley states, in the *Australian Medical Journal* for August, that for some time past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wineglass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage. The morbid condition here described is so very common that we would invite the experience of any gentleman who may see fit to give this remedy a trial.—*Am. Med. Digest*.

THERAPEUTICS OF ANÆMIA.—In his Gulstonian Lectures upon Anæmia, Dr. Sidney Copeland showed that iron acted with great rapidity in enriching the blood corpuscles. He has found arsenic in some instances more efficacious than iron, and as a hematinic ranks it next to that metal. Phosphorus has been given with benefit in a case of idiopathic anemia. Quinia, strychnia, and the mineral acids were of value as aids to iron. Manganese is a dead failure. Oxygen increases appetite and assimilation, but is not a hematinic directly. Transfusion, as a last resort, must be used in pernicious anemia, before the patient is very far gone. He thought well of the use of defibrinated blood by the rectum systematically.—*Louisville Medical News*.

THE USES OF NITRATE OF SILVER.—Dr. Chas. K. Mills, speaking of nitrate of silver (*Philadelphia Medical Times*), said that in nervous disorders he had found it one of the most useful remedies. In posterior spinal sclerosis, it ranked next to iodide of potassium. In chorea he had given it also with apparent success; and sometimes it seemed to be of use in sclerosis of the lateral columns. In epilepsy it was not so good as the bromides, or as the zinc salts with belladonna.—*Med. Record*.

THE SIZES OF FAMOUS HEADS.—In *Nature*, Mr. Tuckett gives the following as the sizes of hats worn by certain distinguished men: Lord Chelmsford, 6½ full; Dean Stanley, 6¾; Lord Beaconsfield, 7; the Prince of Wales, 7 full; Charles Dickens, 7½; Lord Selborne, ⅝; John Bright, 7½; Earl Russell, 7¼; Lord Macaulay, 7⅜; Mr. Gladstone, 7⅜; Mr. Thackeray, 7⅝; Louis Philippe, 7¾; M. Julien, 7¾, Archbishop of York, 8 full.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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This Journal has the largest circulation of any Medical Journal Canada.

DISEASE REGISTRATION.

It is believed by the profession generally that the public would be greatly benefited by the establishment for the Dominion of a system of disease registration, and the necessity for such a system has on several occasions been urged upon the Federal Government. On this continent but little has yet been done, nor even attempted, in the way of reporting and registering diseases. In Michigan and Massachusetts plans have been put into practice for this purpose, in connection with the State boards of health, and though the methods of collecting are yet very imperfect, it is believed that eventually great benefits will result.

It is very well known that the reporting and registering of deaths alone, however perfect, though very essential and indeed indispensable, does not furnish a reliable index of the state of the public health, nor the amount or proportion of disease usually prevailing, either as regards the entire country, or, especially, different localities; as diseases, and even the same epidemic, may be much more fatal in some localities than in others, and at certain seasons than at others. In order that sanitary work may be more effectually carried out, it is absolutely necessary to know, as accurately as possible, the state of public health in a locality, and not alone the number of deaths, the causes of these, etc. Regarding the approach and spread of epidemics, obviously much more may be learned, and at a much earlier day (which is of the very first importance), by means of a system for reporting and registering diseases, than by the registration of

deaths only, which do not take place for some time, long or short according to the nature of the disease, after the appearance or breaking out of the epidemic.

Doubtless, vastly more may be learned, too, concerning the effects of prevailing winds on the spread of diseases, and of the effects of atmospheric conditions and changes upon the public health (through the remote or secondary consequences of prevailing insanitary conditions) by means of a system such as we are alluding to, than by the registration of deaths. In Great Britain some valuable observations have recently been made bearing upon the spread of diphtheria through the conveyance of the contagion to localities many miles distant, by means of the wind. In connection with a system of disease registration, much knowledge regarding all the various and now possibly unthought of methods of the spread of such diseases might be obtained. The advantages to be derived from such a system are so great and obvious that little need be said on this point.

Two or three years ago, as our readers are aware, an attempt was made in Ontario to carry into practice a system for learning the condition of the public health, by soliciting medical practitioners in various localities to furnish weekly reports. But it is hardly to be expected that gratuitous reporting such as then attempted will, for any length of time, yield much, if any, practical good. The reports of diseases in Michigan and Massachusetts are made gratuitously by medical men who agree to do the work; but out of over a hundred voluntary reporters in various sections of Michigan, only between fifty and sixty reports on an average are received weekly by the State board of health. These, though furnishing considerable information, cannot be very satisfactory, as it is very desirable, indeed indispensable, to anything like good practical results, to have a report from every section of country every week. We believe it will not be possible to secure these without some reasonable remuneration for the work done, and it is confidently expected that the Dominion Government will shortly provide a sufficient sum for carrying into practice some plan for the collection of disease statistics.

At the meeting of the Ontario Medical Association, a plan was brought forward by Dr. Playter,

which appears very feasible, and was favorably received. It is, briefly, as follows:—It contemplates the appointment by the Federal Government of 144 observers in different parts of the Dominion, from among medical practitioners of several years' standing and experience, who shall make regular weekly reports of the prevailing diseases in their respective localities. The number of observers suggested will be in the proportion of about one to every 30,000 inhabitants in each Province. Each observer is to be provided with blank forms and addressed envelopes, and shall make a weekly report of the diseases coming under his notice, for which he shall receive from the Government a sum of not less than \$25 for the 52 weekly reports. The blank forms proposed, which are somewhat similar to those now in use by the Michigan State Board of Health, are so arranged as to be very readily filled up. The form gives in a printed column, the names of the ordinary prevailing acute diseases, and in opposite columns spaces for registering the number of cases coming under the notice of the observer, the order of prevalence, increase or decrease, severity, etc. The filling up of these blanks need not occupy more than a few minutes' time at the end of every week. As the advantages of these reports become more generally known and appreciated, the remuneration, and also the number of observers might be increased. The total cost of the proposed reports would be about \$3,600 per annum.

Of the 65 observers which, under the proposed arrangement, would be allotted to Ontario, one might be appointed in each of the 37 county towns, the remaining 28 equally distributed in the surrounding villages. The same arrangement might also obtain in the other Provinces.

The reports from the different observers throughout the Dominion would be carefully studied and compiled at the central office in Ottawa and the results published weekly in a bulletin, with or without other sanitary information, and distributed throughout the Dominion to physicians, health officers and the press.

Since writing the above, we observe that Dr. Playter's plan has been approved of by the Ontario Medical Council, at the late session, and a resolution passed endorsing it.

AMERICAN MEDICAL ASSOCIATION.

The thirty-third annual meeting of the American Medical Association was held in St. Paul, Minn., June 6th, 7th, 8th, and 9th, 1882. Dr. P. O. Hooper, the Vice-President, occupied the chair in the absence of the distinguished President, Dr. J. J. Woodward, on account of sickness. The meeting was largely attended, upwards of nine hundred members having registered their names. Considerable interest was manifested with reference to the probable action of the Association towards the delegates from the New York State Medical Society, in consequence of the Society having adopted a code which permits consultation with homœopaths, and this matter was one of the earliest to come up for adjudication. Protests against their admission were forwarded by several medical societies in different parts of the Union. These protests were referred to the Judicial Council, which reported at an early stage against the admission of the New York State Delegates. The report was adopted without any discussion, and the matter dropped. The Code of the New York State Medical Society allows the utmost freedom to its members to consult with all *legally qualified* practitioners, and we believe that, notwithstanding the action of the Association, the time is not far distant when other societies will do likewise. We believe that Homœopathy should neither be persecuted nor recognized, but simply let alone. It owes its success largely to the martyrdom it has enjoyed at the hands of the regular profession, therefore let us cease giving it any further excuse for being a martyr. Let it alone, and it will sooner or later drop its distinctive title and merge into the general profession. We do not see that granting permission to consult with homœopaths in diagnosis, surgery, and operative midwifery in any way countenances homœopathy, while, on the other hand, refusing to enter a sick chamber until the homœopath is ordered out, smacks very much of persecution, and the public so regard it. We have great respect for majorities, but majorities are not always right, and so we regard the action of the American Medical Association. The address on medicine was delivered by Dr. Ochterlony, of Louisville, who took for his subject the "Progress of Medical Science." The address on surgery was by Dr. W. A. Byrd, of Quincy, Ill., in which he restricted him-

Poole, A. Boucher, A. Foucher de St. Maurice, A. Cheval, A. F. Schmidt, W. Henault, H. Dauth, A. Bernard, J. B. Gibson, H. Roy, E. McKay, A. Delisle, J. Rodier, A. N. Worthington, C. Rochon, L. J. N. Delorme. Twenty-one candidates were rejected. The right of Dr. Keyes, of Georgeville, Que., to register under an Eclectic diploma granted in 1868 by the Province of Ontario was discussed, and legal opinions affirming the right were submitted. The case was deferred. The detective officer, M. Lamirande, presented his report for the past six months, which showed that he had taken out twenty-two actions; eleven were successful, four were dismissed and seven were still pending. He had also collected a considerable amount of arrears of annual assessments. The committee appointed to investigate the charges against Dr. A. M. Ross, suggested the insertion of a clause in the Medical Act to the following effect:—"Any registered member of the medical profession who shall have been convicted of any felony in any court of law, or who shall have been guilty of infamous or disgraceful conduct in any professional respect, shall be liable to have his name erased from the register, etc., and the Provincial Board shall cause enquiry to be made, and upon proof of such conduct, shall cause the name of such person to be erased from the register." The following committee was appointed to draft a new tariff of fees:—Drs. Lemieux and Parke, of Quebec; Lachapelle and F. W. Campbell, of Montreal; Prevost, of St. Jerome; Ladouceur, of Sorel, and Worthington, of Sherbrooke. The following gentlemen, graduates of the respective colleges, received the license as members of the college:—

McGill University.—A. A. Henderson, William Stephen, A. D. Struthers, H. W. Thornton, A. H. Dunlop, R. H. Klock, W. G. Duncan, W. B. Burland, R. C. McCorkill.

Bishop's College.—W. J. Prendergast, N. C. Smillie, J. L. Foley, W. D. M. Bell.

Victoria College.—F. St. Jacques, J. Bte. LeRoy, J. H. Gauthier, F. P. Vanier, S. K. Kelly, J. Bte. Maillet, A. Snyck, H. Manseau, N. Dubeau.

Laval University.—A. Marois, A. Marcoux, A. C. Hamel, I. Cormier, J. Cuerrier, O. Maillet.

Dr. Larocque, Health Officer of Montreal, called attention to the Public Health Bill, now before Parliament. A resolution endorsing it was passed, and the college adjourned.

ONTARIO MEDICAL ASSOCIATION.—Dr. MacDonald, of Hamilton, President of the Ontario Medical Association, has made the following nominations to the temporary committees for this year:—

Surgery, Pathology, and Anatomy—Drs. Canniff, Oldright, Strange, Toronto; Powell, Edgar, Groves, Fergus; Philip, Brantford; Worthington, Clinton; Eckroyd, Mount Forest; Hunt, Clarksburg; Leslie, Hamilton; and Taylor, Goderich.

Medicine, Materia Medica, and Physiology—Drs. Hamilton and Clemesha, Port Hope; Mullin and Wallace, Hamilton; Fulton, Cameron, and H. H. Wright, Toronto; Gillies, Teeswater; Clark, Oshawa; McKay, Woodstock; Winskel, Brantford; McDonell, Brechin; Metcalf, Kings-ton; and Morton, Wellesley.

Obstetrics, Gynecology, and Jurisprudence—Drs. Rosebrugh, Hamilton; Bray, Chatham; Burritt, Peterboro'; Yeomans, Mount Forest; Battersby, Port Dover; Bowlby, Berlin; Hall, Meaford; Dunlap, Loughboro'; Hillary, Aurora; Gardiner, London; Holmes, Chatham; Trimble, Queenstown; Black, Uxbridge; Thorburn, MacDonald, Ross, sr., Pyne, sr., and Temple, Toronto.

Ophthalmology and Otology—Drs. Reeve and Palmer, Toronto; Bonnar, Albion; Baugh, Hamilton; Ryerson and Rosebrugh, Toronto.

Necrology—Drs. Woolverton, Hamilton; Ghent, Priceville; Knight, Tamworth; Gunn, Durham; Kitchen, St. George; Riddel, Toronto; McTavish, Staffa; James, Burgessville; and Day, of Trenton.

Audit—Drs. G. Wright, Robinson, and Lett, Toronto; Tucker, Orono; Curry, Rockwood; Mackelcan, Hamilton; Secord, Bright; and Bruce Smith, of Sparta.

Papers and Business—Drs. Workman, Sweetnam, Machell, W. B. Geikie, McPhedran, Zimmerman, and King, of Toronto; Inksetter, Dundas; Mullin, Hamilton; Allan, Harriston; Monroe, Dominionville; Stalker, Harwich; and Magill, of Oshawa.

Committee on Arrangements—Drs. Bascom, Uxbridge; Robinson, Markham; Buchan, J. Ross, jr., McFarlane, Pyne, jr., Duncan, Smith, Nevitt, Bryce, Wagner, and McCullough, of Toronto.

HYDROLEINE AND MALTOPEPSYN.—We have pleasure in calling the attention of the profession to the above preparations, introduced by the proprietor Mr. Hazen Morse. These remedies are of the best possible quality, and will be strictly maintained at the highest standard. The many testimonials regarding both articles, from leading practitioners, are a sufficient guarantee of their great value. Without making any invidious comparisons regarding other manufacturers' preparations, or their mode of doing business, the proprietor desires to present his remedies to the profession, and let each physician judge for himself of their merits. He also wishes it to be distinctly understood that these preparations will be kept strictly in the hands of the profession. As the hot weather is now approaching, we would call special attention to the value of maltopepsyn as a digestive in the treatment of diarrhoea from indigestion, cholera infantum, &c., &c. We are glad Mr. Morse has met with the decided success he has, and heartily wish him a continuance of the same.

THE STARR MEDALS TORONTO UNIVERSITY.—At a recent meeting of Convocation Mr. Houston presented the report of the committee appointed to enquire into and report upon the mode of awarding what are known as the Starr Medals in the Faculty of Medicine. The report submitted that the present method was not in accordance with the intentions of Dr. Starr, whose bequest is the foundation of the prizes. The report, therefore, recommended for this and other reasons, a complete change in the conditions of competition for these medals, recommending (1) that the medals should be awarded as the result of post-graduate competition; (2) that the conditions of competition should be framed with a view to promote original investigation on the part of the competitors; (3) that Starr Medal work should be accepted as a substitute for the thesis for the degree of Doctor of Medicine.

TO GRADUATES OF BELLEVUE MEDICAL COLLEGE.—A second decennial revision of the Catalogue of Alumni of this College is being prepared for publication, and we are requested to ask that all graduates send their present address, at once, on a postal card, to the Historian of the Alumni Association, Bellevue Hospital Medical College, New York.

NEW OPERATION FOR UTERINE DISPLACEMENTS.—Dr. Adams, (*Glasgow Medical Journal*, June, 1882,) describes a new operation for uterine displacements. It consists in exposing the extremities of the round ligaments of the uterus where they lie covered only by the skin and areolar tissue at the pubes, drawing upon them so as to lift the uterus, and then securing the ligaments so as to cause them to form a new attachment to the pubes. The same operation suggested itself at about the same time to Dr. Wm. Alexander, of Liverpool, England, and the latter has successfully treated four cases, the details of which are published in the *Medical Times and Gazette*, April, 1882. The new operation has received the endorsement of Profs. Cleland, Leishman and others, and is likely to become a recognized operation for certain forms of displacement of the uterus.

APPOINTMENTS.—Dr. J. Robinson has been appointed Assistant-Physician to the Toronto Lunatic Asylum. Dr. W. E. Winskel, of Brantford, has been appointed Assistant-Surgeon to the "Brant" Battalion, "Dufferin Rifles," vice Dr. W. T. Harris, promoted. R. Dawson, B.A., M.D., of Montreal, has been appointed Surgeon to a section of the Canadian Pacific Railway. Dr. Girdwood, of Montreal, has been appointed Surgeon of the Eastern Division of the Canadian Pacific Railway. Dr. J. W. Cameron has been appointed House Surgeon of the Women's Hospital, Montreal. Dr. Leprohon, Spanish Vice-Consul, Montreal, has been created a Chevalier of the Order of Charles III. Drs. Jas. F. Bell and E. R. Woods have been appointed Assistant-Physicians to the Toronto General Hospital.

MEDICAL MEMBERS OF PARLIAMENT.—The following are the names, so far as obtained, of the medical men who have been elected to the House of Commons in the recent contest:—Sir Charles Tupper; Drs. Orton, Wilson, Bergin, Hickey, Landerkin, Ferguson (Welland), Platt, Ferguson, (Leeds), Sproule and Springer, Ont.; Lesage Blanchet, DeSt. George, Fortin, Grandbois and Rinfret, Que.; Cameron and Forbes, N. S. McIntyre and Robertson, P. E. I.

Dr. Jas. E. Robertson, P. McLaren, and J. F. Gillies have been elected to the Local Legislature of Prince Edward Island.

SUPERINTENDENTS OF INSANE ASYLUMS.—The Association of Superintendents of Insane Asylums held its thirty-third annual session in Cincinnati, on the 30th of May and following days. In the absence of the President, Dr. C. A. Walker, the Vice-President, Dr. J. H. Callender, presided. There was a large attendance of members present, and a number of interesting and valuable papers were read and discussed. Dr. R. M. Bucke, of the London Asylum, ably represented the Canadian section of the Association. He also read a paper on the "Growth of the Intellect."

A TORONTONIAN'S GRADUATING ESSAY.—Dr. James W. Bell, of Toronto, has recently published a pamphlet entitled "Thoughts on Emigration," written in Germany, to obtain the degree of Doctor of Philosophy, in which he was successful. Dr. Bell, who has spent the last four or five years on the Continent, will return to Canada in a few weeks. The pamphlet examines the sources, directions, kinds, and causes of emigration, as well as its social, political, and economical effects upon the individuals and nations concerned.

SYSTEM OF GYNÆCOLOGY BY AMERICAN AUTHORS.—A work bearing the above title is now in course of preparation in the United States, and we have been requested by Dr. Janvrin, of 191 Madison Ave., New York, who is writing the "History and Statistics" of the subject, to bring it under the notice of our readers. All who wish the history of their cases published should send him the reports before the 1st Sept. prox. Blank forms, containing lists of the questions referred to, will be sent to any address. All communications should be addressed as above.

NOTICE.—Medical practitioners in Ontario, whose names do not appear on the Medical Register are requested to send their names and post-office addresses to Dr. P. H. Bryce, Secretary of the Provincial Board of Health, Toronto, in order that they may receive documents published by the Board.

OBITUARIES.—Dr. John Brown, LL.D., of Edinburgh, well known as the author of "Rab and his Friends," died on the 11th of May, at the age of 72 years. Sir John Rose Cormack, M.D., F.R.C.P., died on the 13th of May, at his residence in Paris, aged 67 years.

WESTERN HOSPITAL, MONTREAL.—The "Woman's Hospital" of Montreal, has become amalgamated with the "Western Hospital," under the name of the "Woman's Department of the Western Hospital." The medical staff of the Western Hospital is as follows:—Consulting Surgeon, Dr. Hingston; Consulting Physicians, Drs. David, Kollmyer, and Simpson; Acting Staff, Drs. F. W. Campbell, Kennedy, Wilkins, Perrigo, McConnell, Wood, Armstrong, Cameron and Proudfoot.

SIGN OF CANCER OF THE BREAST.—Mr. Nunn, of the Middlesex Hospital, London, in his recently published work on cancer of the breast, says that the entire breast is displaced. A line drawn from one nipple to the other will be found not to be horizontal but inclined towards the unaffected side, or in other words, the nipple of the affected side will be found *elevated* above the true horizontal line of natural symmetry.

IRON WITH MERCURY.—In his "Aids to Rational Therapeutics," Fothergill says, by giving iron along with mercury, full doses of the latter may be given to very broken down subjects without fear. His own individual experience has been that while he uses mercury very freely in syphilis, no case of salivation or other mercurial trouble has occurred since iron has been systematically given with the mercury.

We have received from Dr. Oldright a letter disclaiming that he "carried about a petition for signatures" on behalf of his appointment as Chairman of the Ontario Board of Health. It was too late for this issue, which was set up earlier than usual, but will appear in our next.

CHRONIC BRONCHITIS.—The following will be found very valuable in chronic bronchitis especially in old people:

℞ Amm. carb. ʒj.
Spts. Æth. Nit.
Syr. Scillæ aa ʒss.
Tr. Camph. Co. ʒiij.
Infus. Senega ad. ʒviij.

M.

Sig. A tablespoonful every four hours.

CORONER.—Dr. W. J. Passmore, of Conestogo, has been appointed coroner for the County of Waterloo.

Books and Pamphlets.

ELEMENTS OF PHARMACY, MATERIA MEDICA, AND THERAPEUTICS. By Wm. Whitla, M.D., Queen's University, Belfast. With lithographs and woodcuts. London: Henry Renshaw, 366 Strand.

The work of Dr. Whitla is a most excellent elementary treatise on these subjects, and well adapted for the use of students commencing the study of materia medica. The work is divided into three separate parts, viz.: I. Pharmacy; II. Materia Medica; and III. Therapeutics; and the drugs are arranged alphabetically. It is, therefore, exceedingly convenient for ready reference by the student. The important subject of pharmacy is treated in a most practical, instructive, and attractive manner. In short, the whole work shows evidence on the part of the author of those special qualifications which eminently fit him as a teacher. The work has been most favorably received by the medical press in England. We have no hesitation in recommending it to students commencing the study of this exhaustive and exhausting subject.

THE INCIDENTAL EFFECTS OF DRUGS. A Pharmacological and Clinical Handbook, by Dr. L. Lewin, Assistant at the Pharmacological Institute of the University of Berlin. Translated by W. T. Alexander, M.D. New York: Wm. Wood & Co

This little work has been most favorably received both at home and abroad. The position and reputation of the author are a sufficient guarantee of the value of the work. In reference to the above we have received a notice from G. S. Davis, Publisher, of Detroit, that he has also under contract an edition of this valuable work, which shall contain all the additions and alterations which are to appear in the new German edition.

A STUDY OF THE TUMORS OF THE BLADDER, with original contributions and drawings, by Alex. D. Stein, M.D., Surgeon to Charity Hospital, etc. New York: William Wood & Co. Toronto: Hart & Co.

The attention of the author was drawn to this subject by the fact of his having four cases of tumor of the bladder under his observation. With this personal experience as a basis, he began the study of the literature of the subject of tumors of the bladder, and the monograph before us is the outcome of this labor. The work is as complete as possible in every practical detail bearing on the

nature, symptomatology, diagnosis and treatment of tumors of the bladder. A number of illustrations add to the interest of the subject.

HEALTH AND HEALTHY HOMES IN CANADA. A short work on Domestic and Public Hygiene. By R. Sproule, M.D., Peterboro, Ont.

In this little *brochure* before us the author has endeavoured to draw attention to the hygienic condition of the people with a view to sanitary improvement. The work will no doubt prove of value to those for whom it is intended, if they can only be prevailed upon to read up on the subject. In the absence of popular works on the subject of hygiene this book will fill a gap, which it is to be regretted has too long remained unfilled. We congratulate Dr. Sproule upon his effort to supply the public with a concise and practical work on the subject.

THE POPULAR SCIENCE MONTHLY for July, 1882. New York: D. Appleton & Co.

The number for July gives a collection of articles, nearly every one of which is a treatise in itself on some topic of public interest. Among some of the subjects may be mentioned, "Plant-cells and their Contents," by Prof. McBride, of Iowa; "Physiology of Exercise," by DuBois-Raymond; "Ethics of Vivisection," by Dr. Samuel Wilks; "Protoplasm," by Dr. Francis M. White; "The Mechanics of Intermittent Springs," "Relation of Music to Mental Progress," "The Jews in Europe," etc., etc., all of them interesting topics.

THE ORIENTAL CASKET—Edited by Emerson Bennett, and published by J. Lum Smith, 912 Arch Street, Philadelphia, \$2.00 per annum.

The above interesting monthly Magazine is devoted to poetry, tales, sketches, essays, wit, wisdom and humor from the world of literature, science and art. It will be supplied, with the "Canada Lancet," for \$4 50 per annum, in advance.

Births, Marriages and Deaths.

On the 20th June, Dr. W. R. D. Sutherland, of Winnipeg, to Nellie, second daughter of Dr. Richardson, Toronto.

On the 23rd of May, Dr. Maxwell, of Bear River, N. S., in the 37th year of his age.

On the 10th ult., Dr. James McIlmurray, of Toronto, aged 82 years.

At Coldstream, on the 12th ult., Dr. H. W. Lloyd, formerly of London, Ont., aged 31 years.

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. XIV. TORONTO, AUG., 1882. No. 12.

Original Communications.

LACERATION OF THE CERVIX UTERI.*

BY J. ALGERNON TEMPLE, M.D., ETC., TORONTO.

Prof. of Obstetrics and Diseases of Women, Trinity Medical College.

Mr. President and Gentlemen,—I purpose very briefly to bring to your notice to-day the subject of "Laceration of the Cervix Uteri." It is not my intention to dwell on the causes, symptoms or mode of treatment; such information any of us can easily get from the modern text-books; nor have I anything new to advance. In a Society like ours, we can do ourselves much good by recording our own personal experience, and we are met together to-day for that very purpose.

My object, then, is to detail my own experience, and to bring forth, I hope, the experience of those amongst us who have taken an interest in this all-important subject,—one of the newest and most important advances recently made in Gynæcology.

To Dr. Emmet, of New York, we are undoubtedly indebted for all we know on this subject, and though the operation is meeting with great opposition from a host of practitioners both on this continent and in Europe, yet I believe their opposition does not stand on any sound basis,—rather on prejudice, than clinical experience—from all I can gather from the various discussions that have been going on recently. I find that the strongest opponents of the operation are men who have had little or no experience in the operation, and who are both writing and talking against it for reasons best known to themselves. Yet I would ask, can you name an operation that has not met with opposition? Had the original promoters of ovariectomy not manfully struggled on through the most discouraging records and opposition, this

grand triumph of modern surgery would not now be in existence, and many a valuable life saved through its instrumentality would have been consigned to an early grave.

That this operation—Trachelorrhaphy, or, Hystero-Trachelorrhaphy—has a brilliant future before it, I am convinced, and the enemies to the operation now, will, I expect, become its strongest supporters hereafter. One of the strongest proofs, to my mind, of the stability of this operation, is in the fact that the original operation introduced by Emmet in 1862, has not yet been modified.

I do not belong to that class of practitioners who are easily led away by a new or novel procedure. For some years back I have been patiently following up the literature on this subject, and it is only within the last year that I have become convinced of the absolute necessity of this operation in certain cases, and that nothing short of the operation would effect a cure. Understand me distinctly, I do not think that every case of laceration requires to be stitched up; undoubtedly there are some cases so slight as to cause no serious inconvenience to the patient, and others, again, which unite of their own accord,—the mere rest in bed, with attention to common rules of cleanliness, being quite sufficient to cause union.

It is not immediately after labor that these cases come under our observation; in a large majority of cases the tear is small, gives rise to no special symptoms, most difficult in fact to detect from the swollen condition of the cervix after delivery, and unless the tear is so extensive as to cause serious hæmorrhage—so as to compel us to examine the woman with a speculum—they pass by unobserved.

According to the statistics furnished by Emmet, this accident occurs in 32.80 per cent. of cases of delivery; this point, however, is not yet definitely settled; that the accident is of frequent occurrence, there is no doubt. That the age of the patient or the social position of the woman is no important factor in the frequency of the accident is important, as it appears to be as common in the young woman as the one more advanced in years, in the rich woman as in the poor. And that this accident is not always due to the medical attendant is worthy of remembrance. In the most careful hands it has occurred; it is liable to occur to any one of ourselves, though using the utmost care and caution.

* Read before the Ontario Medical Association, June 7th, 1882.

The most frequent site of laceration is in the anterior lip, inclined to the left side ; the next in frequency being double laceration. It occurs in tedious as well as in rapid labors, though the rapid deliveries, in all probability, furnish the most cases.

The abortionist furnishes many cases, probably because of his ignorance in the use of instruments ; likewise also the forceps, when used by unskilful men, give as many cases ; here, however, it is unjust to blame the forceps, but rather the man who used them should be blamed. Cases arising from this source are very frequently bilateral in their nature.

A lacerated cervix gives rise in after life to very many complaints of females. Prominent amongst the effects, we notice irregularity in the menstrual flow, followed sooner or later with excessive menstrual discharges, and during the inter-menstrual period the woman complains of excessive leucorrhœal discharges, pains in the back and thighs, with a sense of weight in the pelvis ; she becomes ænemic and nervous, loses her appetite, and her general health fails. The process of involution is seriously interrupted, so that the uterus remains large and heavy ; the mucous membrane of the cervix, as also the cervical tissue, undergo cystic degeneration sometimes to an excessive degree, so that it becomes completely honeycombed ; the torn edges of the cervix soon become thickened and everted, and from the constant uterine secretion accompanied by the increased weight of the uterus, it excoriates itself by friction against the vaginal walls. This condition is frequently mistaken for ulceration and treated as such by caustics, which only aggravate the already diseased condition. Now these conditions which are gradually brought about and in all probability the result of some years, baffle all attempts at cure unless the lacerated cervix is restored by an operation. Still other more serious conditions than those mentioned, may result from this accident. I allude to pelvic cellulitis. A low form of inflammatory action is set up, which eventually develops into a true attack of peritoneal cellulitis ; it is found situated, as a rule, between the folds of the broad ligament on the same side as the laceration exists. This will in time lead to lateral displacement of the uterus through contraction of the lateral ligaments. Prolapsus of the uterus is another condition which may result from the ever-increasing weight of the uterus

pressing down, and without there being any laceration of the perineum, as occurred in one of the cases I operated on. And lastly, there is but little doubt that cancer of the cervix is not an infrequent sequence to this condition.

I will now briefly detail my own experience and the results which have followed the operation.

CASE I. M. J., æt. 27, married four years, mother of one child ; previous to marriage was always healthy ; first and only labor was very tedious ; forceps used to effect delivery ; convalescence very slow. Some months after delivery complained of constant pain in the back with dragging pains within the pelvis, frequent desire to micturate, profuse leucorrhœa, locomotion difficult and painful. After she weaned her child her menstrual periods returned in frequent and excessive discharges ; uterus gradually became so low as to almost protrude through the vulva, and eventually did so. Was treated by different practitioners in many and various ways without deriving any benefit, and for the past two years her life has been a burden to her, her uterus being all the time external to the vulva except when in the recumbent position. She could not pass any urine unless she first pushed the uterus up with her finger and retained it there.

On examination I found complete procidentia of the uterus with an extensive laceration on the left side, the laceration measuring $2\frac{1}{2}$ inches in length ; the torn edges were thick and everted ; the uterine cavity measured $5\frac{1}{2}$ inches long ; the mucous membrane of the cervix, from constant exposure to friction from the clothing, resembled ordinary skin ; her general health was much impaired ; menstrual periods frequent and excessive, and she was quite unable to attend to her ordinary daily household duties. I advised the operation of trachelorrhaphy, to which she consented. After carefully denuding the edges, I brought them together by putting in nine silver wire sutures ; she was placed in bed and weak carbolic acid injections used twice daily. On the ninth day I removed the sutures and found complete union throughout the whole line of incision. As a precaution I kept her in the recumbent position for four weeks ; at the end of that time I allowed her to go about and for safety's sake put in a pessary to assist in maintaining the uterus in position. In six weeks from the time of operation the uterus was reduced in

size $1\frac{1}{2}$ inches; her first menstrual period after the operation only lasted four days. She walked to my house, a distance of over two miles, with perfect ease; all her pains and uncomfortable sensations had disappeared and she expressed herself as feeling quite well for the first time since her confinement. In her case she had no laceration of the perineum whatever, and yet the uterus, from its constantly increasing size, had prolapsed completely; and this very simple operation entirely restored her to health, which I claim could not have been done in any other way.

CASE II. M. H., æt. 40, married; one child, three or four miscarriages. Since the birth of her child ten years ago, she has never been well; menstrual periods profuse, constant pain in the back and thighs, profuse leucorrhœa, loss of appetite, pain in connexion, general failure of health, nervous and irritable. Vaginal examination revealed double laceration of the cervix, with erosion of the everted edges; uterus tender and enlarged and retroverted, with cystic degeneration of the cervical glands.

Many and various have been the plans of treatment she has been subjected to, without deriving any benefit. I advised her to submit to the operation. Five sutures were put in on one side and four in the other. Removed them on the tenth day; good primary union throughout, without any bad symptoms, and the woman, now three months since the operation, is rapidly recovering her health.

CASE III. History almost identical with previous case, though not so bad, having only a single laceration. The operation in her case has also been a complete success and she is rapidly regaining her health, with all her old uterine complaints disappearing.

CASE IV. M. T.; a case of double laceration of long standing; her monthly periods very irregular and excessive in quantity, with constant profuse leucorrhœa, pains in back and thighs, total inability to get about from great impairment of the general health. In her case I put in eight sutures, seven of which united; the one nearest to the point failed, leaving however but a very small point ununited, which will, I think, granulate; but as it is only very recently since I operated, I cannot speak with much certainty.

CASE V. M. S., æt. 38; mother of five children, youngest five years; her most prominent

symptom is excessive menstruation, which amounts to menorrhagia, lasting ten days, during all of which time she is confined to bed; her general health is very poor and she is of a nervous, irritable disposition. I have for the past two years tried every possible means to relieve her, but without effect. The late Dr. White, of Buffalo, told her nothing but the operation would cure her. I operated on her about four weeks ago. Unfortunately, two days after the operation, her periods came on with great violence, and I regret to say the operation has entirely failed, as not one of the sutures united, which I attribute to two reasons mainly: first, the uterus was so dense and hard that I could scarcely get any needles through the tissues, in fact I broke several of them; and, secondly, I did not get the sutures as deep in as I should have wished. I purpose, however, to try it again.

CASE VI. My friend, Dr. Macdonald, kindly allows me to report this case in his practice, in which I assisted him. M. E., æt. 40, a well-developed woman of German descent, the mother of nine children, has suffered from pain in the back and bearing-down since first delivery. Menstruation has since then been painful and profuse, though regular, with excessive leucorrhœa and general weakness. Examination revealed rupture of the perineum to verge of anus. Uterus slightly prolapsed; cervix ruptured laterally, about $1\frac{1}{2}$ inches in extent torn; edges swollen and everted, and cystic degeneration of cervix. Tracheiorrhaphy was performed. Nine silver-wire sutures were inserted; eight of these were successful, the one nearest the right lower edge failed. Since the operation the cervix has become much smaller, the woman's general health greatly improved. Twenty days after the operation, the patient herself volunteers the statement, "I cannot thank you enough, Dr., for the comfort I now enjoy." Dr. Macdonald, at this operation, used a double hooked wire-twister of his own design, which was a great assistance in securing the sutures firmly. Perineorrhaphy is to be done later on.

I may briefly say that my mode of operation is that recommended by Dr. Emmet, viz.: pare the edges of the laceration with either scissors or knife (I prefer the scissors) and bring the edges together by silver-wire sutures, keep the patient quiet in bed, remove them on the ninth or tenth day, and daily use warm but weak carbolized vaginal injections.

If no other reason can be advanced in favor of the operation than the prevention of cancer of the cervix, I think it strong enough, as it is the opinion of many gynaecologists of the day that this lesion is a frequent exciting cause of cancer. And I take the liberty, in conclusion, of copying my closing remarks from Dr. Thomas' last edition on Diseases of Women: "No part of the body of a woman is so liable to the development of cancer as the uterus; no part of the uterus so liable to it as the neck, and no tissue of the neck so liable to it as the glandular lining membrane. Exposure of this by eversion, the result of laceration would, theoretically, be supposed to be a fruitful exciting cause of that affection, and practical observation abundantly supports theory in reference to the matter. My own observation has for several years made me feel sure of this, and that of Brieskey, Emmet and Veit is recorded to the same effect. This alone offers a valid indication for the closure of lacerations attended by local engorgement and irritation."

ON VENESECTION. FACTS? THAT ARE FACTS. IF YOU PLEASE, WHEN THEORIES CHOOSE TO IGNORE THEM.*

BY J. CLARK, M.D., OSHAWA, ONT.

Mr. President and Gentlemen,—In the *Globe* of June 3rd is the following, part of an editorial on a political subject: "In the good old days when the surgeons had full sway in the sick chamber, before modern medical science and modern common sense had brought the life of hope to the diseased and suffering, blood-letting was the one great panacea for all the ills that flesh is heir to. If the patient had, or was supposed to have inflammation, he was bled to reduce it. If, on the other hand, he was pale and debilitated, bleeding copiously was the thing to strengthen him. If he had bile in the spring, or catarrh in the fall, there was nothing like a good bleeding to restore him to health. No matter how feeble or poorly nourished his system or how badly in want of a tonic, the first care of the sapient knight of the lancet was to bleed him within an inch of his life. If, as occasionally happened, the patient by virtue of a good

constitution and the recuperative forces of nature, slowly regained strength, in spite of this killing treatment, we can readily imagine the self-satisfaction with which the professional blood-letter would point to him as a trophy of his skill and a living demonstration of the healing powers of phlebotomy. Happily for humanity the days of the blood-letter are passed in enlightened countries, though a half-fossilized specimen is still occasionally to be met with, who is never tired with vaunting the superiority of his own drastic method, and deriding the quackery of the modern scientific treatment."

I think this description of the evils of the old system so admirable, that I avail myself of it as an introduction and as nearly all that need be said as to the *abuse* of venesection. I present myself with great pleasure as the "half-fossilized specimen," who will endeavor to defend the *use* of blood-letting in certain cases, "vaunting" it as admirable, and the neglect of which is often disastrous.

For about thirty years the practice of venesection has been pretty generally abandoned by the profession, and I think I can show without sufficient reason, and that the result has not redounded to the public benefit, but the contrary, and hence I have been stirred up to address you. Although in the departments of physiology and pathology very great advances have been made, I doubt very much, on the whole, whether the percentage of success in practice is very much larger under modern treatment than under that so very much condemned of about forty years ago, when I began practice. In this particular matter of venesection, I have no doubt the opposite is the case. Beginning life so long ago, and ever on the look-out for results, I have come to the conclusion and assert that no advantage towards the cure of disease has been derived from the abandonment of venesection; on the contrary, that serious loss of life has ensued and will continue to ensue, till venesection is restored to its proper place among our means of cure. So thoroughly convinced of this fact am I, that on receiving from the Secretary notice of the meeting of this Association, I wrote to the president, who very kindly encouraged me in my desire to address you on the subject. I regret that my facts are so ill-arranged and that time and health were not given me to enable me to place them properly before you, as you all know so much depends on the ability of the advocate; but in the absence of

* Read before the Ontario Medical Association, June 8th, 1882.

more capable defenders, I present myself with such facts as my memory can produce, in the hope that some attention may be directed to the matter and that the subject may be reconsidered. That the practice was formerly grossly abused there can be no doubt, but I agree with a recent writer that more harm had arisen from the abandonment of the practice than ever was done by its greatest abuse. What was the reason of this ignoring the lancet? Probably the prejudice in the public mind; the Bible expression, "the blood is the life"; the utter inability of reconciling theories; the trouble of the operation, the *caccœthes scribendi*; Dr. Sangrado; the love of change and the self-sufficiency of youth, possibly are some of them.

The world is naturally averse
To all the good it sees or hears,
But swallows nonsense and a lie
With greediness and gluttony.

Fools rush in where angels fear to tread.

The early advocates for the abandonment of the lancet were not of such transcendent ability; there were hundreds of professional men who were far in advance of them who continued to bleed, and I distinctly recollect reading some cases of Dr. Bennett, given with the utmost complacency, but which nearly all terminated in death, the recuperative powers of nature not being adequate to the occasion. The hue and cry, however, were too much, and it was extremely difficult to do what you deemed right in the face of the universal condemnation. But that the neglect of venesection, even where it is not immediately fatal, causes in hundreds of cases a prolongation of the disease, and leaves to nature to effect in weeks or months what the lancet, properly handled, can relieve at once and cure in a day or two, is a fact of which I am perfectly assured. I do not mean to recommend any drainage of the system, for the mere loss of blood will do little towards the cure of the disease, but I pursue a plan that I was induced to adopt long ago, when blood-letting was in vogue. I observed then that reliance was placed on mere bleeding and not on producing an impression on the system. The plan is this. In cases of inflammation the patient to be treated as follows: to be raised from the recumbent position (for left in that position the greater part of his blood could be removed without the desired result). He is to be raised and kept in a sitting upright posture, the puncture to be sufficiently large to allow the blood

to flow rapidly so as to induce faintness as quickly as possible, which will be evidenced by the relief of pain and dyspnoea if the chest is concerned, and followed by profuse perspiration which of course should be encouraged by covering the patient with warm wraps; if the syncope be complete, he must be placed recumbent, if not, semi-recumbent. The ordinary medicine not to be dispensed with. There is no fear from great loss of blood if this method be followed to the letter, and that it will put an end to the inflammation I pledge you my word. I assert that in cases of inflammation of the lungs, of the serous membranes, congestion, apoplexy, venesection is admirable and nothing else so effectual. I never repeat the bleeding, nor do I think it necessary if properly done. I have used (and do use) the lancet in hundreds of cases, and will mention a few of them. Some years ago I bled a man who had congestion of the lungs threatening serious complications, who had been ill for weeks, and who was at once relieved and is well now. Another under my own care, who for several days had fever and congestion of the brain, whose case becoming serious, I told his wife I would bleed next day if he were not better. As he was no better on my next visit his wife begged for a consultation, to which I assented. My medical friend, after convincing himself and admitting that the case was really grave and evidently getting more and more so daily, said that he had no experience in bleeding, indeed, had only once used the lancet in his life—in a case of Asiatic cholera, which recovered. He accepted my assertion that bleeding would relieve and supported me. He did this and we had the satisfaction of leaving our patient free from fever and pain, in a profuse perspiration and in fact from that day he quickly recovered. Subsequently my patient went to California, and so grateful was he that he borrowed from others to enable him to discharge his indebtedness to me. Again, a case of pneumonia; the man had been ill from Saturday to the following Thursday, discharged his non-bleeding doctor and called me in, his friends believing that as he was getting worse daily he was in imminent danger; that, too, was my opinion. I did not hesitate to bleed (although I warned them that, coming in so late, I would not be responsible for the result), in the manner I have described, with the result that he was at once relieved and quickly got well. In

cases of apoplexy, I have succeeded in apparently hopeless cases, by the use of the lancet, in restoring sensibility and preventing paralysis. I recall a case where a man, suffering from determination of blood to the head, requested his doctor to bleed him; he declined, but gave medicine; in a week afterwards he had an attack of apoplexy, followed by paralysis and was utterly useless as long as he lived. I think the inference is obvious. Within a fortnight, lately, I bled three patients for pneumonia, apoplexy, and congestion of the lungs, respectively, all of whom speedily recovered—the case of apoplexy without paralysis. She was 76 years of age; consciousness began to return while the blood was flowing and she is now quite well. The pneumonia case was a most alarming one.

I do not lose any of my cases of inflammation where I can use the lancet. Has it not often occurred to many of you to observe how nature has come to the relief of the over-laden system by discharging blood from the nose, lungs, bowels, womb, etc., with resulting relief to those organs; and no doubt it was not mere chance or caprice that established the custom of bleeding, but deduction and observation of these facts, that induced our ancestors to establish it, and it required only the self-sufficiency of the present day without any adequate substitute to abolish it, only for a time I believe; and I believe also that many years will not pass over your heads before a practice so natural and beneficial will be restored, to the saving of many lives and to the credit of common sense. It is lamentable to see and hear of so many deaths of young men from pneumonia, as I have done, when in my conscience I believe they ought to have lived. It is impossible, I think, to ignore the fact that we have gone from one extreme to the other, and that we have rushed into greater danger than we have escaped. I am supported in some of these views by Prof. J. Wharton Jones, in an article published in the *Lancet* of November 2, 1879. He writes: "Instead of simple reform of indiscriminate practice, complete reaction in the opposite direction has taken place, as is so common when extreme views on any subject come to be called in question." He asks whether by abstention from blood-letting altogether, as is the present fashion, inflammations of important organs are not often allowed to run a long and disastrous course, which might be prevented by a timely abstraction of

blood in such quantities that the loss of it could be in nowise injurious to the patient? He answers this question in the affirmative, and gives as illustrations cases of iritis. He quotes Dr. Marshall Hall's axiom, that "in the operation of venesection, the quantity of blood lost before fainting comes on, *whilst the patient is in the erect position*, is never more than is requisite for the cure of the inflammation and never so great as to prove hurtful to the patient." He says the late Mr. Wardrop remarked, "that of a number of persons bled for inflammatory diseases, those who had lost the *largest quantity of blood by the fewest repetitions* of the operation have made the most rapid recovery." Also that the doctrine that the inflammatory process consists merely in "proliferation," virtually ignores the vascular congestion and the symptoms depending on it, such as "rubor cum calore et dolore"; the doctrine thus refutes itself by omitting cognizance of the condition on which depends the supply of the materials for the maintenance of the increased activity of cell multiplication, constituting proliferation. It is needless, I hope, for a man of my age to say that he has nothing to gain personally from having written this paper, but the satisfaction of having fulfilled a duty, alas! most inadequately. The exhibition of myself is painful to me, and I fear, in consequence of the imperfect manner in which I have discharged the duty, will be without result; but I shall have the satisfaction of feeling that I have done, what in me lies, to restore a much abused remedy to its former place in our regard, and if I do not succeed, some one coming after me will. Truth will prevail against prejudice as all other things sooner or later.

"Facts are chieft than wunna ding
And munna be disputed."

Some years ago, feeling indignant that so potent a remedy as venesection had not been tried in some cases of spinal meningitis, I addressed "a plea for the lancet" to the *London Medical Journal*, intending (as the editor kindly inserted the letter) to follow it up with a statement of cases; but hopeless of any good arising and want of health prevented. I advised a friend to try the lancet, who assured me that he had met with great success by its use. Pray dismiss prejudice from your minds, and in severe cases of inflammation try what the lancet will do for your patients, and I am sure you will be satisfied that my assertions are not exaggerated.

generations, but veritable facts. More than this, I say you are bound to prove, after what I have said, that I have told truth or falsehood.

REPORT OF THE DELEGATES OF THE
ONTARIO MEDICAL ASSOCIATION
TO THE INTERNATIONAL MEDICAL
CONGRESS, HELD IN LONDON, ENG-
LAND, AUGUST, 1881.*

BY W. B. GEIKIE, M.D., F.R.C.S.ED., TORONTO.

Mr. President and Gentlemen,—Having had the honor of being one of your delegates to the late International Medical Congress, which met in London, England, last summer, and having been requested by your worthy President, Dr. Covernton, to do so, I beg leave to submit to you, on behalf of my co-delegates and myself, a short report with reference to that great gathering. To weary you by attempting to give a synopsis, or anything like it, of the work of *any one* of the many sections into which the vast concourse of medical men then assembled was divided, would be entirely out of place, inasmuch as many, if not all, of the gentlemen present, have already read digests of these, far better than could be given in the short compass of a delegate's report.

At the grand opening in St. James' Hall, on Wednesday, August 3rd, nearly 3,000 members were present. H. R. H. the Prince of Wales, one of the patrons of the Congress—H. M. the Queen being the other—and by express invitation of the Prince, His Imperial and Royal Highness the Crown Prince of Germany, with many of the most distinguished men of Great Britain and other countries, honored themselves, and the Congress, by being present.

The opening address of the President, Sir James Paget, was what might be expected from so eminent a speaker, one of whom our profession may well be proud, a most eloquent, learned, wise, worthy, and withal a most humble man—a truly great and universally-respected member of our calling, which he truly characterized as offering, among all the sciences, the most complete and constant union of those qualities which have the greatest charm for pure and active minds—novelty, utility, and charity.

The various sections met in the forenoon at ten o'clock in the rooms set apart for that purpose, and in the afternoon at two, of each day. The general meetings were all held later in the afternoon in St. James' Hall. One feature of the Congress was especially interesting and useful to those who availed themselves of it, viz., the exhibition of models and specimens illustrative of cases. As an instance: Prof. Charcot himself showed a life-sized model, prepared under his own supervision, and since presented to St. Thomas Hospital Museum, of an old woman who died of locomotor ataxy, showing the extraordinary degenerative changes sometimes occurring in this disease in the bones forming the articulations. Beside the model was the entire skeleton of the same patient. The museums of the several metropolitan hospitals, too, furnished their very best specimens, illustrative of almost every form of surgical and very many forms of medical disease.

Living patients, with rare skin and other diseases, were daily exhibited at an early morning hour—9.30—and such remarks were made in elucidation of particular cases as were thought necessary by the gentlemen who had charge of them. Members visited, either by special appointment or as they might desire, various hospitals daily, and the utmost pains was everywhere taken to make such visits both pleasant and profitable in a practically scientific point of view.

The Congress work proper was done in the sections, which were as follows: Anatomy, physiology, general pathology and morbid anatomy, materia medica and pharmacology, medicine, surgery, military surgery and medicine, ophthalmology, diseases of the skin, a sub-section—diseases of the throat, diseases of the ear, diseases of the teeth, mental diseases, diseases of children, obstetric medicine and surgery, and, lastly, state medicine.

Each of these sections had its president, vice-president, and a list of gentlemen named the Council, in which latter body great pains had evidently been justly and wisely taken to have the profession from various countries adequately represented. This is just what in such a gathering was to have been expected; but to me, as a Colonial delegate, and to all of my confrères with whom I spoke on the subject, it seemed strange that the Colonial profession, so far as any separate mention went, was simply entirely lost sight of. India sent

* Read before the Ontario Medical Association, June 1st, 1882.

7 members to the Congress; Africa, 6; West Indies, 2; Mauritius, 2; Malta, 1; Australasia, 20; Ceylon, 1; Canada, 23. Yet no Colony had its profession acknowledged by having had even one of the 62 Colonial delegates placed on any of the section councils. It seemed a great oversight, particularly in the case of our most distant and most populous Colonial possessions, and many thought, including every Englishman to whom I mentioned the matter, that although not done in the least degree intentionally, it was nevertheless unquestionably a blunder, and one which many would gladly have tried to rectify had the matter been sooner brought before their notice.

Professor Grainger Stewart, of Edinburgh, and Dr. Duckworth, of London, one of the Secretaries of the Medical Section, took much interest in this matter so far as Canada was concerned, and the latter gentleman was particularly anxious at least partially to correct the omission by having our Canadian profession alluded to in some way—as at the informal dinner with which the Congress ended—and some of us were told to be ready for something of this kind; but there was so much confusion at this dinner after the serious part of it, *i.e.*, the dining, was over, that it was with the utmost difficulty Prof. Ackland, of Oxford, was given a moment or two to move what, so far as I could hear, was a well merited vote of thanks to the President of the Congress.

Shortly before leaving England, after having carefully thought over the matter of the non-recognition of the Colonial profession, I wrote to the President, Sir James Paget, on the subject, referring, as a Canadian delegate, chiefly to Canada. The substance of the letter was as follows:—

That although I had not the pleasure of knowing the President personally, yet as with us in Canada as elsewhere, his name is a household word; and as the worthy President of the recent "International Congress" the liberty, as one of the representatives of the Canadian profession, was taken to congratulate him on its very great success. I hoped and believed that much good will result from it, and felt sure that it will tend to unify the profession in many ways. One thing, however, the result, doubtless, of mere oversight, was to be regretted, *viz.*, the fact that no mention was ever made of the Canadian profession as being represented at the Congress, except in the printed list

of representatives where the names of the delegates appear. As individuals, our delegates, and there were only a few sent in that special capacity, were all treated with the utmost possible courtesy; but it was rational to suppose that the thousands of medical men we represented, would have been glad to have had the satisfaction of being referred to as "the Canadian profession" as distinct from that of any other foreign country. But in England, strange as it appears to us, the colonies in this and in many other ways too often receive but scanty public recognition. In Canada, the standard of medical education was pointed out as very high indeed—very far beyond what is required for the most part in the neighboring Republic and in many other countries, and it is constantly improving. Under such circumstances it was but simple truth to say that as Canada closely follows Great Britain as a model in regard to professional education, it would undoubtedly have gratified the Canadian profession, at a gathering like the Congress, to have received some separate mention as a large and respectable body, duly represented. I am satisfied that what is now spoken of, and which was mentioned to me by several of my fellow-delegates, was a mere omission, owing probably to the matter never having been thought of. This letter was written not at all in the spirit of fault-finding, but merely with the view of preventing the recurrence of anything of the same kind at future medical gatherings to which large colonies like Canada, thousands of miles distant, may send special representatives.

Sir James Paget sent me a prompt and courteous reply, acknowledging the receipt of my letter, and explaining that the Canadian and other Colonial delegates had been viewed as British medical men, and for this reason alone the Colonial profession had not been specially recognized; but expressing satisfaction at the matter having been brought up, in order that any similar cause of complaint might be avoided in future.

I could not help, however, although accepting without the slightest hesitation the explanation given by Sir James as the only correct one, wondering that British India throughout all its vast extent, with Calcutta and other large cities; Australasia, with Melbourne, Sydney, Auckland, and numerous other large centres of population; and even the tiny strip of territory known as the

Dominion of Canada, stretching between the small bodies of salt water known as the Atlantic and Pacific Oceans, with Halifax, Montreal, Hamilton, and Toronto, and other cities and towns;—I could not help wondering, I say, that the idea of giving representation anywhere to the many thousands of medical men living in all those vast regions, appears never once to have occurred to the gentlemen who had charge of these details.

In regard to the general arrangements made, and admirably carried out, for the entertainment of the members of the Congress, they were all that could be desired, and more extensive than anyone could have conceived of as at all possible.

The daily programme admirably combined work with pleasure; and the hospitality shown to thousands of professional men, strangers in London, was very great. Banquets, dinners, garden parties, conversaciones, excursions of all kinds, and sight-seeing without end, were the order of the day. The royal palaces, and gardens, and the great city residences of many of the nobility were thrown open to us, and everyone seemed intent on making our visit, during the Congress week, to the world's metropolis what it indeed was, a week of red letter days, never to be remembered but with pleasure, and the pleasure of these remembrances such, as will not fade with the lapse of years.—All of which is respectfully submitted.

COMPLICATIONS OF TYPHOID FEVER.

BY H. P. YEOMANS, B.A., M.D., MOUNT FOREST, ONT.
(Member of the Ontario Board of Health).

Phlegmasia dolens, or phlebitis, as a complication of typhoid fever, occurring in case of a male patient, is very rare.

Dec. 31, 1881. E. G., æt. 33, called at my office. Said he had been ill since Thursday, when he had a chill; feels feverish, face somewhat swollen; sent home and ordered to go to bed.

Jan. 1. Morning temperature, 101; evening, 102½.

Jan. 2. Slept well last night. Temp., morning, 100½; evening 103½.

The following is morning and evening temperature, taken at 8 a.m. and 8 p.m.:—

Jan. 3rd. 100½ morning, 103½ evening; 4th. 103½, 103½; 5th. 101½, 104; 6th. 100, 102; 7th.

99½, 102½; 8th. 100½, 101; 9th. 99, 102½; 10th. 99½, 101½; 11th. 100, 101½.

From the 12th until the 22nd, the temperature was not higher than 99 in the morning and 100 in the evening.

On the 22nd, in the morning, he felt very well; had a good appetite; had slept well every night for ten nights; bowels and all functions apparently normal; tongue slightly furred. Sat up all day and transacted some business. In the evening the temperature rose to 102.

Jan. 23rd. Evening temperature, 102; 24th. morning, 102½, evening, 103. 25th. 101½, 101½; 26th. 99½, 102½; 27th. 100, 102.

There was no material change from the 27th until Feb. 3rd. On that morning the temperature rose 99½. During the day the symptoms remained the same until 5 p.m., when a very severe chill and shivering fit came on. This was one of the characteristic chills which followed at irregular intervals and accompanied the phlebitis. At this time the left leg was considerably swollen; the saphena vein was tender. There was a great deal of pain in the leg, which increased on the slightest movement. Immediately after the chill there was a sudden elevation of temperature, which rose in two hours from 99½ to 105, and then, in two hours, fell again to 103½.

Feb. 4th. 101½, morning; 104 evening; 5th. 100, 101½; 6th. 100½, 102; 7th. 100, 103; 8th. 101, 103½; 9th. 103, 104½, noon; chill to-day; 105½ at 3 p.m., 104 at 8 p.m.; 10th. 103½, 103½ at 3 p.m., 102½ at 8 p.m.; 11th. 100½, 100½; 12th. 99, 101 at 7 p.m., 105½ at 10 p.m.; to-day had four natural motions in succession, sat up on bed-pan in the bed; had a very severe chill again; 13th. 104½, 103½; 14th. 99½, 100½; 15th. 100, 102; 16th. 99, 102; to-day had a slight chill; 17th. 102, 102½; 18th. 99, 100; 19th. 98½, 100; 20th. 99½, 100½; 21st. 99, 103 at noon, 100 at 8 p.m.; no chill, leg felt sore and saphena vein tender to-day; 22nd. 99, 100. After this the temperature did not rise in the evening above 100 and convalescence rapidly advanced.

In noting the prominent features of the case, we may observe that the fever commenced on Thursday, Dec. 28th, with a chill. He called at my office two days afterwards and was ordered to go home and remain in bed.

On the third day the temperature was taken for

the first time, 101 in the morning and 102½ in the evening. On the eighth day the evening temperature reached the highest point, 104, and after that declined. On the fourteenth day the evening temperature was 101½, and it rose no higher than 100 during the succeeding ten days.

During the second week, the symptoms plainly indicated the approach of the convalescence that followed in the third week. On the twenty-sixth day there was a slight relapse, caused by over-exertion and mental excitement in business.

During the whole course of the fever, which lasted thirty-five days, including the relapse, there were no symptoms of delirium, tympanites, or lesions of the intestinal glands, no sudamina and only a few petechiæ.

On the thirty-third day some symptoms of phlebitis appeared, such as swelling of the leg and tenderness of the saphena vein. On the thirty-seventh day the first chill occurred. These chills were very severe, amounting almost to convulsive twitching of muscles of limbs and body similar to chorea. The chill lasted fifteen or twenty minutes and was followed by four or five hours' of profuse perspiration. Before the chill came on, a feeling of apnœa was complained of by the patient. The sudden rise and fall of temperature, also, was very remarkable.

There were three very severe chills and one very slight chill. The first on the thirty-seventh day, the second on the forty-third day, the third on the forty-seventh day, and the fourth on the fifty-first day. On the fifty-sixth day the pain and soreness of the saphena vein increased, but no chill occurred. After the sixty-first day the evening temperature was not higher than 99 and convalescence was thoroughly established. Great care was exercised, however, for some time, in order to prevent a relapse.

I am not prepared to assign any cause for the phlebitis in this case, at present. Several opinions are advanced by different writers, to which I shall not refer; my intention is to state the symptoms and history of this case as observed at the time. I may, however, note the fact, that no premonitions of phlegmasia appeared at the commencement or during the attack of the fever, and that the phlebitis may be termed in this case, a serious sequel to a mild case of fever.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—It was, and still is, my intention to refrain from controversy regarding the Chairmanship of the Provincial Board of Health. I do not even know, as you assume to do, the name of the gentleman who signs himself as "Junius."

But my attention has been directed to your recent editorial, in which are some mis-statements put forward as matters of fact, which, if allowed to pass uncontradicted by me, might be assumed to be undeniable.

I must therefore ask you to publish my distinct and emphatic denial of your statement that I "carried about the city petitions for signatures." I understand that a document in favor of my appointment was drawn up by one influential friend in the House at the suggestion of another, and was signed by all the medical members of the House, except one. I do not, to the present day, know the contents of this paper; and as it is the only one to which, so far as I am aware, signatures were asked, it is hardly necessary for me to state the fact that I neither wrote, suggested, dictated, nor "carried about" any document of the kind.

Your second mis-statement of fact occurs in your remarks about my report on the City Hall. If you had referred to the report itself, you would not have needed to state that there were "no suggestions as to improving the unsanitary condition of the present buildings," as you would have found many, some stated specifically and the rest implied, in pointing out defects. Had the *Mail* reporter supposed that any person of experience would have based a serious criticism on a hurried newspaper report, he would probably have been more careful in epitomizing. The clause from which you quote reads as follows:—"With the facts in view, to which I have drawn your attention, I think it is quite apparent that the present buildings and surroundings can never be altered to meet the fullest requirements of health, without so tearing them to pieces, and adding to them, that very little of the old structure will be found in the new. In other words, new buildings will be more economical, and are necessary for the maintenance of sound and energetic men in the City Hall. All that can be done with the old is to

"make certain temporary alterations, to do away
"with the more glaring defects."

Members of the Provincial Board, in common with many of their professional brethren, have not been remiss in pointing out causes of typhoid fever in Toronto and in advocating reforms; but whether it was necessary for the Board, when pressed with much urgent business to refer, at its first meeting, to the unusual amount occurring last year, and to consider hurriedly a question involving much more than the points you allude to, and which will require a carefully prepared report;—whether the Board expects me to assume the *role* of giving "instructions to my colleagues," as you propose when criticizing my address;—whether it will interfere with the discharge of my duties if I should decide upon continuing to divide between University College and the Toronto School of Medicine the same number of hours that a lecturer, say in Practice of Medicine and Clinical Medicine, devotes to one school:—or whether my having given seven lectures last year, in the Veterinary School, in the place of a sick friend, will so interfere; these and other questions of a more trivial nature raised by you I might by some be expected to discuss. But I agree with you that such discussions would be neither profitable nor "in the interests of the public and the profession"; I will therefore refrain from them; and should you consider it necessary to again depart from the course of action implied in this quotation, I trust your readers will not expect me to trouble you or any other journalist with a reply.

I am, sincerely,

WM. OLDRIGHT.

Toronto, 17th June, 1882.

[Before writing the article to which Dr. Oldright alludes, we took pains to make due enquiry on every point. A medical gentleman in this city, whose veracity has never yet been called in question, told us that Dr. Oldright personally asked him to sign a petition recommending him to the Government for the chairmanship of the Board. The other points are admitted. The clause of the report above quoted shows on the face of it the impractical nature of the recommendations].—Ed. LANCET.

SPIRÆA ULMARIA.

To the Editor of THE CANADA LANCET.

SIR,—The use of this drug in the treatment of senile enlargement of the prostate gland has, in three cases, given me wonderful results. About ten months ago I was called to see T. B., æt. 68, in the city of London, and found him suffering from retention of urine. I had him put immediately into a hot hip-bath, the hot water coming well over the pubes, and administered a drachm of paregoric and twenty drops of Hoffman's anodyne every thirty minutes. He remained in the bath about fifteen minutes, when hot wet cloths were applied over the bladder. Nearly two hours elapsed before this method of treatment had the desired effect. After the bladder had been evacuated, I found on examination per anum, hypertrophy of the prostate. I then explored the urethra with a No. 10 catheter, found no obstruction and the instrument glided into the bladder without difficulty. Two weeks subsequently to this attack, I was called again to the same patient. I tried my former method of treatment, but it failed. I also failed to introduce the catheter. Matters were becoming alarming, and I was about to send for professional assistance, when it came from another source, viz., an old woman. She volunteered the information that the patient wanted a dose of Queen of the Meadow (the common name for *Spiræa Ulmaria*) and that if he got it, it would cure him in quick time. She said some could be procured in a few minutes. I asked her to get it. It was brought, an infusion was made and half-a-pint given to the patient, and in fifteen minutes he desired to micturate and emptied his bladder without difficulty. Since that time the patient has needed no medical or surgical aid to rid him of his old enemy. If he gets on a spree and his old trouble threatens him, he takes Queen of the Meadow tea and rejoices in being saved. In two other cases of this nature in which I used this drug, the results were just as satisfactory. I have tried it on myself in health and find it acts as a diuretic and astringent, since it sometimes causes smarting pain as the urine passes along the urethra. Its antispasmodic properties are very marked at the sphincter vesicæ, and I think much of its virtue in the affection named results from its power to overcome the contraction of the neck of the blad-

der arising from irritation in the prostatic region. It is my opinion that, in many cases of retention of urine from prostatic enlargement, the enlargement is not, *per se*, the main obstacle, but rather the spasmodic contraction of the sphincter vesicæ, as the result of a sudden congestion or inflammation of the prostate gland. In conclusion, I would ask for this drug a fair trial by the profession.

Yours truly,

J. BAUGH, M.D.

Hamilton, June 19th, 1882.

Reports of Societies.

NEW BRUNSWICK MEDICAL SOCIETY.

The annual meeting of the above-named society was held in St. John, N.B. on the 18th ult., Dr. Steeves in the chair. There was a large attendance of members present. After routine, the President read his annual address, a paper on "Insanity." In dealing with the subject, he noticed the causes, increase, the relations of civilization to insanity, and, lastly, its prevention.

The election of officers was then proceeded with, and resulted as follows:—President, Dr. S. Z. Earle; Vice-President, Dr. Todd; Secretary, Dr. Duncan; Corresponding Secretary, Dr. Coleman; Treasurer, Dr. P. R. Inches; Trustees, Drs. Inches, Walker, and Allison; Committee of Arrangements, Drs. Addy, Earle, and Coleman.

Dr. Bayard, President of the New Brunswick Medical Council, reported that some changes had been made in the Medical Act at the last session of the Legislature. During the year ending July 18th, 1882, the names of 178 persons had been entered on the Medical Register; of these 121 are natives of New Brunswick, 20 of Nova Scotia, 16 of the United States, 4 of Ireland, 5 of Scotland, 7 of Quebec, 4 of England, 2 of Prince Edward Island, 1 of Newfoundland, 1 of Spain. Of the registered qualifications 134 are from American colleges, 17 from British, 11 from Canadian. Three have registered from continued practice in this Province, 3 possess Provincial licenses, 1 has been licensed by the Council of Physicians and Surgeons of New Brunswick, 9 have both American and British qualifications, 4 gentlemen have passed preliminary examinations. \$563 has been received as fees for registration, as fees for the

certificate \$30, for preliminary examinations \$20. There has been expended \$314, leaving a balance on hand of \$299.

A discussion then took place upon the propriety of consulting the Society upon any contemplated change in the Act before going to the Legislature. The members next visited the General Hospital. They were received and conducted through the building by the Medical Superintendent, Dr. Crookshank, Drs. Earle, Coleman, and Walker. They then proceeded to the Lunatic Asylum, through which they were conducted by the Medical Superintendent, Dr. Steeves, after which the company partook of a bountiful repast.

The Society met again in the evening, when several interesting papers on different medical subjects were read by Drs. Musgrove, Coleman, Gray, Allison, and Atherton, and were discussed by the members present.

The next annual meeting of the Society will be held in St. John on the third Tuesday in July, 1883.

BATHURST AND RIDEAU MEDICAL ASSOCIATION.

A meeting of the above-named Association took place at Smith's Falls on the 28th of June. There was a good attendance present.

The President, Dr. Cranston, delivered an able and appropriate address. He referred to the many changes that had occurred in the district, dwelling upon the death of Dr. Blackwood, who for forty years had practised his profession at Pakenham. He reviewed the proceedings of the recent session of the Medical Council of Ontario, explaining the changes that had been made, and expressed his satisfaction at the harmonious manner in which that body had performed its duties. He informed them that an inspector for the district had been appointed, who since accepting the office had convicted two illegally practising "doctors."

The following officers were elected for the ensuing year:—*President*, Dr. Cranston, Arnprior; *Vice-Presidents*, Dr. Horsey, Ottawa, and Dr. Burns, Almonte; *Treasurer*, Dr. Hill, Ottawa; *Secretary*, Dr. Small, Ottawa. *Council*, Drs. Baird, Pakenham; Dickson, Pembroke; McCallum, Smith's Falls; Groves, Carp; Lynch, Almonte; Preston, Carleton Place; Sweetland, Grant, and H. P. Wright, Ottawa.

Dr. Powell read a valuable paper on "Heart

Disease." He dwelt upon the significance of murmurs and the prognosis that might be given. A general discussion took place on several points brought forward.

Dr. Wright reported a case of "Diabetes Mellitus," and also one of "Phantom Abdominal Tumor." Dr. Cranston reported a unique case of "Gravid Uterus," with cervix greatly elongated. Some microscopical demonstrations of *Tænia solium* were given by Dr. Small.

Drs. Baird, Burns, Horsey, and Prevost were appointed to prepare papers, and the meeting then adjourned to meet in Ottawa, in January, 1883.

Dr. Acheson, of Smith's Falls, entertained the members of the Association in the evening.

Selected Articles.

CHANCRE OF THE LIP AND EPITHELIOMA.

BY R. C. LUCAS, F.R.C.S., GUY'S HOSPITAL.

Two cases illustrating the resemblance which these two affections often present have lately been attended on the same day, and a careless observer having regard only to the local disease, and ignoring the history and the age of the patients, might easily have fallen into serious error. Nor is the diagnosis always easy when no fact is omitted which might influence the conclusion; but in the two cases before us, despite the similarity in appearance, there is corroborative evidence in each case which leaves no doubt as to the nature of the disease. One patient is a man about thirty years of age and unmarried. He has a thickening of the edge of his upper lip slightly to the right of the centre. In the middle of this thickening there is a superficial abrasion upon which the secretion and epithelium cake and scale. The whole lip is a little swollen, but if you pinch it between your finger and thumb you feel a hard circular rim to the sore about the size of a sixpence.

Now look at the other man. He is a respectable married man, upwards of fifty years of age. He has a superficial sore on his lower lip to the left of the median line. The surface is almost exactly similar to the other man's sore; it is cracked, and has a tendency to scab and scale. It too has a thickened rim, but if you pinch it you find the resistance less than in the other case; but so similar are the sores, that if their positions could be changed I do not think you would be able to distinguish one from the other. Yet one is a cancer, the other the initial stage of syphilitic infection. How, then, can one distinguish them? First, the

age and state of life make it probable that the young man's sore is a chancre, the old man's an epithelioma; but thirty is not too young for epithelioma, nor is fifty proof against syphilis, although with age impetuosity yields to discretion. Epithelioma below thirty-five is very rare. Last year I operated upon a man aged thirty-eight for a cancer recurrent in the cheek and glands of his neck, which had been operated on some time before in the country; but this is an exceptional case, and the age is of the greatest importance in aiding our diagnosis. Cancer occurs at the time when the tissues begin to wear out, and epithelioma especially is almost always traceable to long continued irritation.

Next, the position is a distinguishing mark in these two cases, for epithelioma is rare upon the upper lip. The position of the sore upon the old man's lip is almost characteristic; it is just opposite the notch in his teeth made by his pipe. Further, he confessed to always having smoked an unwaxed clay. If mere contact with porous clay is sufficient, after years to set up cancer, you would conclude that there should be a corresponding sore on the upper lip; but the lower lip suffers most, for owing to the weight of the bowl the lower lip is pressed upon as well as rubbed.

A chancre may occur upon either lip as it results from the virus having come into contact with a chance crack. In many cases it will depend upon whether the person is underhung or overhung; for the lip most exposed is most liable to crack, and at the same time most likely first to meet in an embrace. Hunter maintains that neither the blood nor any of the secretions could convey the poison, but this is now known to be untrue. His reasoning on this point was most fallacious. If the blood, he argued, could produce syphilitic inflammation in a healthy wound, no object affected with constitution syphilis could escape from venereal ulcers; for every time he was bled or he scratched himself with a pin the small wounds thus caused would be transformed into so many chancres. Hunter overlooked the fact that the man's tissues by the inoculation were protected, for the time at least, by re-inoculation, but that to another both blood and secretion might prove contagious. There is abundant evidence now of the contagious nature of the blood during the secondary stage, of the vaccine from a syphilitic infant, and of the pus from the secondary ulcers on the lips; hence there is no need to follow Ricord in his loathsome suggestions that these chancres of the lips were the result always of illicit contact.

The time during which the disease has been developing is another most important consideration in determining its character. The old man states that he has had ulceration, more or less, for five years, but that it is only during the last few months that the lip has caused him inconvenience. The other man counts his trouble by weeks, and gives

six weeks as the time since he first noticed the sore. Five years is an exceptionally long history for so small a development of epithelioma, and it is very questionable whether the sore has been epitheliomatous all this time. Rather it is probable that had he left off the irritating cause two or three years ago he might have escaped from the disease from which he is now suffering, for doubtful ulcers distinctly traceable to local irritation will often heal when relieved of the exciting cause. It is now about two years since I saw, in consultation with Dr. Orton, of Kensington, an old gentleman who had been condemned by another surgeon for cancer on the inner side of his left cheek. He was suffering from an ugly-looking ulcer with thickening edges, very like an epithelioma, but upon inquiring into the history we found that it had not been noticed more than six weeks or two months, and immediately opposite we found a tooth stopped with an irregular amalgam stopping. It was clear that the ulcer was excited by the tooth, and I suggested that the tooth should be extracted, after which the ulcer completely healed. Had, however, the irritating cause been allowed to remain for months, it is highly probable that the sore in this old gentleman might have taken on an epitheliomatous character, and the medical man who first saw him would then have been correct in his diagnosis. Thus the time is of great importance in separating an epithelioma from a simple ulcer and chancre.

There is a stage in both cases when the glands under the jaw will be found enlarged; and I remember two patients came last year with sore lips, both with short histories and enlarged glands, and I refused to give a positive diagnosis till I had had an opportunity of watching them. One of these developed a syphilitic eruption during the following week, while the other proved to be suffering from an epithelioma growing much more rapidly than the one we have now under consideration. Time will always settle the diagnosis; for it is seldom, unless the patient takes mercury, that the eruption of syphilis is delayed beyond two months. The man before us with a chancre has now upon his arms and trunk a few brownish papules, which place the diagnosis beyond all doubt.—*London Practitioner.*

AN OVARIAN TUMOR WITH RARE COMPLICATIONS.

Dr. A. P. Dudley and Dr. H. C. Coe, of the house staff of the Woman's Hospital, in a joint communication published in the *New York Medical Journal and Obstetrical Review* for July, 1882, remark that it is a well-recognized fact that statistics of ovariectomy are among the least satisfactory of any in surgery. For a man to report that he

has had so many "successful cases" may mean simply that he has had the good luck to secure a run of uncomplicated ones, such as would have recovered under the hands of any other operator. The public, and even the medical public, are too prone to judge of success by the outward results alone, overlooking the skill, judgment, boldness in meeting emergencies, and the care and anxiety in after-treatment, which a surgeon has bestowed upon a desperate case, and in spite of which it has terminated fatally. To judge of an ovariectomy by the bare statement of the number of his patients who have survived the operation would be most unjust. So varied are the elements which enter into *every case* of ovariectomy, and which render it complete in itself, that it is quite impossible to institute close comparisons, either between individual cases or between the statistics of two different operators. They then give the history of a case that occurred recently in Dr. Thomas's service at the hospital. The patient had a severe illness at the age of 16—an acute intestinal trouble of some sort. After that she was always obstinately constipated, and occasionally had severe colic, with vomiting and tympanites, and was said to have passed gall-stones on several occasions. When she entered the hospital she had been married 20 years, but had had no children, and for 10 years she had not menstruated. Eighteen months before her admission her health began to fail, and she noticed a slight enlargement of the abdomen, attended with severe pain, localized on the left side. Soon after this she passed several concretions by the urethra, and began to discharge fecal matter and gas by the same channel. The tumor grew slowly, confined almost wholly to the left side, and attended with constant intense pain and marked gastric disturbance. It was tapped shortly before her admission, but no fluid was obtained. Dr. Thomas regarded it as uncertain whether the tumor was an ovarian cystoma or an uterine fibrocyst, but felt that its removal would be quite impossible on account of its complete fixity and firm adhesion to all surrounding parts. He made an incision four inches in length to the left of the median line, this being the most prominent part of the tumor, thus dividing the abdominal muscles. The sac, which was found to be firmly adherent on all sides, was punctured, and a quantity of dark-brownish, colloid material evacuated, with the patient turned upon the side. The external incision was extended to five inches; the cyst opening was also enlarged, and the operator introduced his hand and broke up a number of secondary cysts, removing their contents. The cyst was found firmly adherent to the intestines and pelvic viscera. Accordingly, the edges of the cyst-opening were stitched into the edges of the wound, a Thomas's double drainage-tube being introduced into the sac, brought out at the lower angle of the incision,

and held in position by interrupted wire sutures. The patient died on the eighth day. At the autopsy the visceral and parietal layers of the peritoneum were found so firmly united by old adhesions that it was with difficulty that the cavity could be opened at all. The liver was adherent to the diaphragm, anterior abdominal wall, stomach, duodenum, and transverse colon. The spleen was surrounded by old adhesions. The coils of small intestine were adherent to the abdominal parietes, and so firmly glued together that they formed an inextricable mass. The intestines were also adherent to the posterior wall of the bladder, the superior and posterior aspects of the uterus, and to the surface of tumor. Douglas's fossa was entirely obliterated. Upon separating the adhesions near the fundus of the bladder, a cavity of about the size of a hen's egg (diameter four centimetres) was found, which seemed to be a portion of the general peritoneal cavity, shut off by adhesions. It was bounded in front by the posterior surface of the bladder, at its upper third, laterally and posteriorly, by the mass of adherent intestines. This cavity communicated both with the small intestine and with the bladder, in the former case, by two fistulous openings about six mm. in diameter, situated close together, and each leading into a separate knuckle of small intestine. As nearly as could be ascertained, one communication was with the ileum, the other with the jejunum. There were three openings from this false cavity into the bladder, situated side by side, and separated only by narrow bridges of tissue; the largest measured one centimetre in diameter, the others two and three mm., respectively. The bladder was thus opened through its posterior wall, near the fundus. The cavity above described contained a mass of soft, yellowish faecal matter, and three hard, black calculi of irregular shape—all too large to have passed, fully formed, through the fistulous openings in the intestines. (Analysis of these calculi showed them to be enteroliths). The pelves and calyces of the kidneys were much dilated, the renal parenchyma being atrophied and the seat of a chronic diffuse nephritis. No evidence of an acute interstitial nephritis. The dilated pelves contained a dirty, brownish, purulent fluid, having an offensive urinous odor. Both ureters were greatly dilated, the dilatation extending along their whole course, the calibre of the right being nearly equal to that of the small intestine. They contained an offensive fluid similar to that in the pelves. The bladder was capacious, its long diameter being eleven centimetres. It contained soft faecal matter, turbid urine, and gas. The uterus was normal. On the right side the adnexa were completely buried in a mass of adhesions. Upon the left side the site of the ovary was occupied by a polycystic tumor, which filled the pelvic cavity and extended upward into the abdomen. Its diameter was four centime-

tres. It was adherent to the small intestines and to the sigmoid flexure, which lay behind it. The upper half of the tumor had a peritoneal covering, while the lower half was devoid of it. The growth was found to be a multilocular ovarian cyst, having one large cavity, the inner wall of which was covered with papillomatous growths. This inner surface was of a black color, and in places was sloughing.

“BACK SLING” FOR FRACTURED CLAVICLE.

BY LORENZO HALE, M.D., ALBANY (*Medical Annals*).

E. M. Moore, M.D., of Rochester, has well shown the faults of the treatment with the axillary pad. While the theory of treatment as developed by him is demonstrably correct, yet his bandage—“a shawl,” “eight inches in breadth” “when folded”—appears to be somewhat cumbersome and warm; and, in passing over and in front of the injured shoulder, it lies over the depressed fragment, and hides the fractured bone away from inspection; and, when firm extension is attempted, pressure appears to come on the already depressed fragment.

These undesirable conditions are obviated by the use of a sling, applied by holding one end of a narrow roller bandage against the scapula of the sound side, and then passing the bandage under



the forearm of the injured side near the elbow (the elbow being first bent and drawn back), thence up, around and over the same forearm and across the back to the axilla of the sound side, then in front of and over the sound shoulder, to unite with the

end held at the place of beginning (see figure). It is not always necessary that the bandage should be thus officinally crossed on the back; but a "back sling" forming parallel lines on the back, although slightly cooler, is not quite as secure.

And further,—instead of finding support for the hand by a sling in front, fastened over the fractured clavicle,—a narrow strap may pass from the wrist across the chest to the "back sling" on the sound shoulder. The front support is thus entirely away from the weak shoulder, and tends to lessen the strain and chafing of the bandage on the sound shoulder.

This dressing admits of the application of a compress over the inner fragment, to be held down with adhesive plaster; but, except when the clavicle is broken into more than two fragments, a compress will seldom, if ever, be necessary, since the "back sling," in drawing back the humerus, makes traction upon the clavicular portion of the pectoralis major—opposing the clavicular fibres of the sternomastoid which have drawn the inner fragment upward—and thus pulls the inner fragment of the clavicle downward.

The outer fragment is also acted upon by this drawing back of the humerus, for the scapula is pushed upward and inward toward the spinal column, and, through the medium of the scapulo-clavicular articulation, the outer fragment of the clavicle is brought upward, and extends outward, and the axes of the two fragments are firmly held in one continuous line. Hence the "back sling" in holding back the humerus, is seen to fulfil what have always been specified as the indications in the treatment of fractured clavicle, viz., to support the shoulder in a direction *upward, backward and outward*.

Similar anatomical conditions as these above detailed are obtained, although to a less degree, by simply pinioning the forearm of the injured side behind the back; this posture is more uncomfortable and less effective than the "back sling," but may be necessary in the treatment of fractured clavicle in imprudent or insane patients, where it would not be safe to permit even the slight freedom of motion allowed by the "back sling."

This "back sling" should be of some material that will not cut nor wrinkle, such as suspender webbing or a wide leather strap; it is light and cool; it leaves the site of the fracture *at all times accessible*; it safely allows a moderate and comfortable degree of motion in the forearm and hand; it gives the patient an immediate sense of security and relief, and is followed in practice by a result that approximates perfection. As it is to be applied over a portion of the clothing, which serves in a measure the purpose of padding, it is agreeable to the patient.

Aged persons and others whose flesh is soft or œdematous requires some form of protecting splint

or padding, as a saddle or muff on the forearm, and also padding in front of the sound shoulder, and in some cases daily tightening and slackening of the bandage; on this account it is convenient to have the ends of the "back sling" fastened with a buckle.

SODIUM NITRITE IN EPILEPSY.

BY W. T. LAW, M.D., F.R.C.S., ENG.

In addition to the extensive list of remedies employed or recommended in the treatment of epilepsy, I wish to suggest the trial of another which I was led to select upon theoretical grounds in a case of this disease which recently came under my immediate and close observation for 18 months. As evidence of my facilities for noting the effect of the remedies tried, it is proper to state that the patient, Mr. M., æt. 29 was received into my own house for supervision and treatment, and that arrangements were made by which any attacks occurring either out of doors or during the night could be noted. Patient's father died of apoplexy, but no other family history bearing on nervous disease could be elicited. Mr. M.'s habits were said to have been unexceptionable as regards drink and morals, and there was no suspicion of syphilis. In mind he had always been "below par," and though sent to various schools, learned very little. Had no fits at this time, but suffered from severe headaches which often kept him in bed. Entered a college, and after a good many years spent in trying to pass examinations, had his first distinct attack of epilepsy about a year and a half before he came under my observation. From that time he had numerous fits. In 1880 he had a seizure, followed by maniacal excitement for some hours. When he came under my charge I noticed that he was above the middle height, fair, and muscularly well-developed; clean shaven, nearly bald, congested face, neck, and hands. The latter were nearly always moist and often cold; nails much bitten. Contracted pupils; marked want of intelligence in manner, slow speech, and great liberation of movement. When walking, he partially extended his arms, as a rope-dancer might, and would touch any object he passed as an aid to muscular co-ordination, while the gait was jerky, uncertain, and slightly ataxic. Mental powers enfeebled and memory defective, though he exercised control over his property. In disposition he was reserved and secretive, and would carefully treasure up dirty fragments of paper and other rubbish found in the street. Curiosity and cunning were largely developed, and when a seizure was approaching uncontrollable fits of giggling often occurred. His great dislike of medication and intense desire of concealing his fits when they occurred, rendered him difficult to treat, and he

HYDROLEINE OR HYDRATED OIL AS
A THERAPEUTIC AGENT IN
WASTING DISEASES.By W. H. BENTLEY, M.D., LL.D.,
VALLEY OAK, KY.From New Remedies, September, 1880.

In October, 1880, I read an advertisement of Hydroleine in some medical journal. The formula being given, I was somewhat favorably impressed, and procured two pamphlets: One on "The Digestion and Assimilation of Fats in the Human Body," and the other on "The Effects of Hydrated Oil in Consumption and Wasting Diseases." They are ably written, and afforded an interesting study. Their doctrines are so reasonable, that I got up faith enough to have my druggist order a sufficient supply to thoroughly test the merits of the preparation.

I was ready to catch at anything to take the place of cod-liver oil. In my hands it has proved an utter and abominable failure in ninety-five per cent. of all my cases in which I have prescribed it since I have been engaged in country practice, and it never benefitted more than forty per cent. of my city patients.

The inland people, who seldom eat fish, can rarely digest cod-liver oil. Almost every week I am consulted by some victim of the *cod oil mania*, who has swallowed the contents of from one to twenty-five bottles, and who has been growing leaner, paler and weaker all the while, until from a state of only slight indisposition, these patients have become mere "living skeletons." Nearly all complain of rancid eructations, and an unbearable fishy taste in their mouth, from one dose to another. They not only fail to digest the cod oil, but this failure overloads the digestive organs to such an extent that digestion and assimilation of all food becomes an impossibility, the patient languishes and pines and finally dies of *literal starvation*. In the comparatively small number with whom I have found cod-liver oil to agree, it has proved very gratifying in its results. In my practice, by far the largest number receiving benefit from it have been children. Those who have, previous to their illness, been accustomed, to some extent, to a "fish diet," will be more likely to digest the oil, and more notably so in cold climates. Still the innumerable efforts that have been made in the shape of "pure cod-liver oil," "palatable cod-liver oil," "cod-liver oil with pepsin," "cod-liver oil with pancreatin," "cod-liver oil emulsions," etc., and so on, *ad infinitum*, attest the fact that the great desideratum after all is to render cod-liver oil capable of retention by the stomach, and digestible when it is retained.

As Hydroleine is partially digested oil, and this partial digestion is brought about by a combination of factors suggested by actual physiological experiments, these facts commend it to my confidence, and a trial of the preparation in seven typical cases convinces me that it possesses

a high degree of merit, and I feel that it is a duty incumbent upon me to call the attention of my medical brethren to the subject.

The first case in which I prescribed it was that of a married lady 28 years of age, a blonde, and the mother of four children, the eldest 9 and the youngest 1 year old. From the birth of this last child she dated her illness, for she made a tardy convalescence, remaining unable to walk for a month. Soon after she began to grow weaker, and soon resumed her bed, which she had not left to any extent since, not at any time being able to sit up longer than fifteen or twenty minutes. During all this time she was under charge of a skillful physician. He had tried many remedies to check the rapid emaciation; among these were several different brands of malt extract, cod-liver oil, and various mixtures of the oil. None of the oils and their mixtures agreed with her. In March, I was called and prescribed Hydroleine, a bottle of which I delivered at the time, directing her to commence with teaspoonful doses, to be gradually increased to twice the amount. It agreed with her finely, and by the time the first bottle was used she was greatly improved. She procured and used two additional bottles, and, at this writing, June 15th, is considered well.

The above case was one of general and persisting emaciation, unaccompanied by any cough or perceptible thoracic trouble. The ensuing case was one of diagnosed

TUBERCULAR PHTHISIS.

The patient a married lady, æt. 32, had been married about 14 years, and was the mother of six children, the youngest two years of age. Several of her sisters had died of the above mentioned disease. Her medical adviser prescribed cod-liver oil, and she had taken a full dozen bottles with plenty of whiskey. The oil had not been digested, although it had been retained by the stomach. Her cough had grown constantly worse, and she grew rapidly weaker, week by week. I prescribed Hydroleine for her, and she commenced to take it in April, about the 15th. It agreed with her finely. She rapidly gained weight and strength, her cough was relieved and has now nearly ceased. She has used nearly four bottles, and continues to use it, though apparently well.

I have prescribed it in three other cases, in two of which the results have been equally gratifying, but in the other case it produced nausea and greasy eructations.

From these trials I am led to think quite favorably of the hydrated oil, and I am led to believe that although it may not agree with all, it will be found of great and permanent benefit to a very large per cent. of consumption and other "wasting" diseases, and that it is destined, at no distant day, to very largely supplant the undigested oils.

HAZEN MORSE, 57 Front Street East,
TORONTO.

SOLE AGENT FOR CANADA.

MALTOPEPSYN

(REGISTERED AT OTTAWA)

FORMULA

SACCHARATED PEPSINE (Porci).....	10 Grains
“ PANCREATINE.....	5 “
ACID LACTOPHOSPHATE OF LIME.....	5 “
EXSICCATED EXTRACT OF MALT (Equal to one tea- spoonful of liquid extract of Malt.).....	10 “

The new Canadian remedy for Dyspepsia, Indigestion,
Cholera Infantum, Constipation and all Disease
arising from Imperfect Nutrition.

It is also exceedingly valuable as a relief for Vomiting in Pregnancy.

TO THE MEDICAL PROFESSION.

Having been employed in the manufacture of Pepsine, Pancreatine, etc., in the United States for the past seven years, and knowing that nine-tenths of the numerous brands of Pepsine and Combinations thereof, in the market to-day, are almost worthless and inert, and knowing further, that the few really good articles are absurdly high priced—one dollar per ounce and upwards—I have decided to offer to the profession, Maltopepsyn, an article unequalled in quality and reasonable in price (fifty cents per two ounce bottle, containing nearly one and one-half ounces of powder).

I will guarantee Maltopepsyn to be compounded exactly as per formula and each ingredient to be of the best quality possible to be made, and therefore I claim the following advantages over the ordinary preparations now dispensed, viz:—

First—The Saccharated Pepsine (Porci) is of a quality superior to any in the market, it is perfectly soluble, tasteless, odorless, very active, and, being saccharated, will preserve its qualities for years, while made in any different manner it will not. N.B. Pepsine is very difficult to procure free from Mucous Creatine and the other impurities of the stomach, and is usually sold containing all these hurtful substances, which not only kill its digestive properties but give it a dark brownish color, disagreeable odor and acrid taste. Pure Pepsine should be light colored, nearly odorless and tasteless.

Second—The Pancreatine is fully equal to that made in London, England, the only Pancreatine in the market at all reliable, and that is so high priced (\$3.00 per oz.) as to almost prohibit its use.

Third—The Exsiccated, or dry extract, is a more effective, palatable and convenient preparation of the nutritive article, Malt, than the liquid extracts usually dispensed.

Fourth—The Acid Lactophosphate of lime is carefully purified and of the best quality. Its therapeutic value is too well known to need further comment.

Upon application from any of the Medical Faculty, I will be pleased to forward samples, which will substantiate the claims made for Maltopepsyn, and I hope for your assistance in this my endeavour to introduce a good preparation at a low price.

HAZEN MORSE, 57 Front Street East, TORONTO

TUBERCULOSIS RESULTING FROM DEFICIENT NUTRITION.

Various as are the opinions regarding the treatment of consumption, all writers concur in the belief that whatever measure is adopted, the strength of the patient must be husbanded with the greatest care, and the most efficient means employed to supply the system with that element which the symptoms indicate as being required to keep up the vitality while such course of treatment is being pursued as is considered suitable. The most striking indication of the presence of this dreadful disease is rapid loss of weight. The patient himself, prone as he is to disregard, premonitory warnings of this insidious malady, cannot but observe an extraordinary difference in the appearance of his form, as first the face, then the trunk and, lastly, the limbs become soft and flabby, and the once well-fitting garments hang loosely about him, his flesh seeming to melt away, so rapid is the change.

EMACIATION.

A natural course of reasoning as to the cause and effect of emaciation under these circumstances has developed the fact that the abnormal consumption of the tissues is the result of nature's efforts to supply the waste, through the blood from the fatty tissues of the body with the requisite amount of material whose oxidation is the source of heat and nerve force, the natural supply, through the assimilation of food, having failed in consequence of an unhealthy condition of the pancreatic secretions causing an insufficient supply of chyle, or a failure on the part of the lacteal tubes, through fever or some cause, to absorb sufficient nutriment.

TUBERCLE.

As the attack upon the tissues of the body progresses, not only fatty tissue is absorbed into the circulation from unnatural sources, causing loss of strength, but particles of albuminoid tissue are carried by the blood and being deposited in channels where the system has no provision for throwing them off, form desquamations centres of disease which, in their turn, throw off infectious matter to be absorbed into the general system. The immense extent of delicate mucous surface in the respiratory passages of the lungs exposed to the contents of the minute blood-vessels which permeate their entire texture, offers the greatest and most susceptible field for the reposition of a large amount of this effete albuminoid tissue. This deposit forms the tubercle whose establishment in the lung is the beginning of that train of circumstances which characterizes the progress of that fatal malady—consumption. Thus it is seen that tuberculosis is either due to the defective action of the pancreatic juice on the fatty elements of the food, or to the non-absorption of the chyle into the blood.

ASSIMILATION OF FATS.

Fatty matter, when introduced to the stomach, undergoes little change by the action

the chyme or digested fibrinous and albuminous matter, to the duodenum, where it comes into contact with the pancreatic juice, and is thereby transformed into chyle, which is a very delicate saponaceous emulsion or suspension of the oleaginous portion of fat. It is when in *this condition only* that fat is capable of absorption by the lacteals, thence passing directly to the venous blood which is supplied to the lungs through the right cavity of the heart; the lungs then absorb from that blood the hydrocarbons or fatty portion, and return the nitrogenous portion to the heart, to form the globulin of arterial blood before passing into the circulation.

This function of partly saponifying and partly emulsifying fats is enjoyed by no other secretion of the alimentary canal but the pancreatic juice, unless we take into consideration the action of the saliva, which is somewhat of that nature; but as the food in most instances is subjected to the action of the saliva in the mouth for so short a time, this feature in the economy is almost inappreciable.

TREATMENT.

The close relations of non-assimilations of the fatty elements of food to wasting diseases, and especially to consumption, is understood, and reason would indicate that if by any artificial means the absorption of fat could be assisted by supplying, as chyle, a proper amount of oleaginous or fatty matter, a nutritive progress would be established which would modify the unhealthy action of the pancreas, and not only relieve the body from the depleting effects of the disorder, but afford an opportunity for treatment and recovery. With the assistance of a thorough knowledge of the chemical process which fat undergoes from the time of its introduction into the duodenum to absorption, a preparation has been introduced and extensively used by the profession in England with highly successful results, indicated by the very flattering commendations of it from many physicians who, having given the treatment of pulmonary disorders their special attention, are peculiarly qualified to attest its efficacy.

HYDROLEINE.

This preparation, to which the distinctive name of hydroleine (hydrated oil) has been given, is not a simple emulsion of cod-liver oil, but a permanent and perfect saponaceous emulsion of oil, in combination with pancreatin soluble in water, the saponification producing a cream-like preparation, possessing all the necessary qualities of chyle, including extreme delicacy and solubility, whereby a ready and perfect assimilation is afforded.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonfuls, equal to 120 drops, contains:

Pure oil.....	80 m (drops)
Distilled water	35 "
Soluble pancreatin.....	5 grains.
Soda.....	$\frac{1}{2}$ "
Boric acid.....	$\frac{1}{4}$ "
Hyocholeic acid.....	1-20 "

DOSE.—Two teaspoonfuls alone, or mixed with twice the quantity of soft water, wine or whiskey, to be taken thrice daily with meals.

The use of the so-called emulsions of cod-liver oil during the extremely sensitive condition of the digestive organs always accompanying consumption does not usually afford beneficial results. Those of the profession in this country who have under their care cases of consumption, diabetes, chlorosis, Bright's disease, hysteria, and, in short, any disease where a loss of appetite is followed by a rapid breaking down of the tissues of the body in its effort to support the combustion supplying animal heat, are urged to give this preparation a trial. It is supplied by the agent for Canada, Hazen Morse, No 57 Front Street East, Toronto, who will forward literature relating to the subject upon application.

MALTOPEPSYN

Combines all the digestive principles that act upon
food, with the nutritive qualities of Extract of Malt and
the brain food of the Acid Phosphates.

PRICE LIST.

Maltopepsyn, (2 oz. bottles, containing nearly 1½ ozs. powder), 50c. per bottle.

“ “ “ \$5 00 per dozen.

“ in half pound bottles \$5 00 per pound.

Less than half the price of any good preparation of Pepsine in the market, and guaranteed to excel the best in the results.

Nearly 2,000 bottles have been sold during the first five months of its introduction, entirely through physicians' prescriptions.

The following is a sample of the great number of testimonials I have received from medical men :-

BRUSSELS, JUNE 28th, 1880.

Hazen Morse, Esq.,

Dear Sir,—I believe Maltopepsyn to be equal, if not superior, to Lactopeptine or Pepsine, in the use of which I have had a very large experience.

Yours, etc.,

WILLIAM GRAHAM, M.D.

CASE ATTENDED BY DR. BURNS, TORONTO, APRIL, 1880.

Child of Mr. Edgell, Toronto, about two years old, suffering from Diarrhœa brought on by indigestion; passed undigested food, etc. Dr. B———had tried many remedies without giving any relief; finally prescribed Maltopepsyn. After the child had taken six doses, there was marked improvement, and before one-half the bottle was used had entirely recovered.

I will make the same offer to medical men on Maltopepsyn as I do on Hydroleine, viz: I will forward upon application, to physicians only, a full sized bottle of Maltopepsyn upon receipt of twenty-five cents, (half price). This offer only applies to the first bottle.

HAZEN MORSE, 57 Front Street East, TORONTO.

would deceive as to his sensations, condition of bowels, etc., whenever possible. After much trouble I got him to take one daily dose of bromide of potassium, 40 grains in the morning, with which I at once began, as a wound on the bridge of the nose indicated a recent attack. From this date, Aug. 9, 1880, fits occurred at the rate of two a week on an average, but always during the night, until Nov. 18, when I watched a seizure from the commencement at about 9 p.m. He was dozing over a newspaper, held upside down, which he had been pretending to read, when a low, peculiar cry indicated an attack. The eyes became fixed and staring, the chin advanced, and the face livid (I noticed no initial pallor). The chest walls seemed motionless and respiration suspended, but a gurgling sound resembling retching closely followed the initial convulsion of the limbs, which began in the arms and legs, which were forcibly extended, the former being rotated inwards and the fingers extended. Both sides seemed equally affected, or nearly so. With this the head rotated strongly to the left, the jaws closed firmly, and the pupils slightly deviated from their usual contracted state. Accompanied by deepening lividity, clonic spasms of the usual kind and twitchings of the mouth succeeded, and I think most affected the right side. The convulsion lasted about 20 seconds, and terminated in relaxation and stupor; saliva tinged with blood from a bitten tongue running freely from the mouth. The lividity disappeared, and the pulse, which during the paroxysm had been frequent and tense, was now slowed and softened, and perspiration moistened the skin. The sphincters were unaffected, and I found the urine normal the next day. Thinking the bromide was losing its effects in warding off day seizures, I gave borax till Dec. 20. In this time two day fits and seven at night were noted. Then followed bromide as before, with short intervals of iron and aloes, till May 30, with the result of eleven attacks in the waking and fifteen in the sleeping state. Belladonna in twenty-drop doses with bromides of potassium and ammonium were now given till Oct. 30, when three day and twelve night seizures were observed. Nitrite of sodium in twenty grain doses was then administered until Feb. 6, when he passed from under my care. During this period a remarkable improvement took place. Three fits only were noted, diurnal on Dec. 15 and Jan. 10, and nocturnal Dec. 16. During these latter months the gait and general manner showed a change for the better. The giggling which formerly heralded a seizure almost entirely disappeared. A disposition to overeat, and post-prandial drowsiness, greatly lessened, and his friends declared they had never seen him look so well before. Among the few particulars, however, in which but little improvement took place, was one I omitted to mention in its proper place, an offensive exhalation from the skin re-

sembling the odour of corduroy and differing from any I have observed among mental or nervous cases. The general treatment was uniform, and consisted in careful dieting, restrictive in bulk, absence of all excitement, attention to the bowels as far as practicable, and a constant watchfulness to repress the tendency to mischievousness which so often accompanies brain deterioration.

The object of this paper is to advocate the claim of nitrite of sodium to a trial in epilepsy. So far as I am aware this drug has not been used as a remedy for epilepsy, but assuming that the nervous discharge or explosion is associated with cerebral anæmia—a view which receives clinical support from the initial pallor of the face and high tension of the radial pulse, as well as from the usefulness of belladonna in certain forms, and of nitrite of amyl during the paroxysm—it seemed natural to look for a remedy capable of influencing the vaso-motor apparatus.

On three or four occasions (under bromides) the bladder and rectum emptied themselves, but, so far as I know, evacuation of the vesiculæ, seminales, voluntary or otherwise, was not a feature of this case. The fits nearly always took place after dinner, from 8 to 9.30 p.m. Mr. M. denied any aura or warning, but I believe headache often heralded a seizure, as did certainly giggling without cause, and drowsiness. He would eat bread in large quantities, if allowed, and I am firmly convinced of the truth of Dr. Radcliff's dictum, that epileptics should be rather underfed than otherwise.—*Practitioner*, June.—*Medical Abstract*.

THE TREATMENT OF CHRONIC RINGWORM OF THE SCALP: A NEW METHOD OF EPILATING THE DISEASED HAIR.—That chronic ringworm of the scalp is a difficult disease to cure, every practitioner will admit. There are two propositions, as regards treatment, which I desire to bring under the notice of the profession. But, first, I must briefly refer to a factor in the problem we are called upon to consider—a fungus growing on and in the hairs, extending deeply into the follicles as far as the roots.

In a paper published in the early part of last year, I pointed out that two things were essential in the treatment of this disease: first, some drug which is capable of destroying the fungus, and so preventing its further development; and, secondly, some vehicle to carry this drug to the part of the follicle where the fungus exists and grows. Arguing, from analogy, that certain chemical substances, called antiseptics, had the power of destroying certain low forms of vegetable life, such as bacilli, micrococci, and bacteria, I suggested that thymol or menthol should be used as the parasiticide, and that chloroform would answer the purpose as the absorbent. But, as the latter was volatile, I added oil to the compound to prevent evaporation.

While trying this liniment, of thymol, chloroform, and oil, in a large number of cases, I was struck with the fact, that in some of them, in spite of the constant application of the remedy, the disease appeared on other parts of the body, and also on other parts of the head previously free. It seemed difficult to understand that, in a strictly antiseptic medium, spores could be carried from part to part and live; but such seemed to be the case, for in some instances, when the liniment had been used too freely, and had run down the neck, fresh spots of the disease showed themselves in that region. During the time that I was considering this difficulty, I found that Koch, in Berlin, had been making experiments on bacillus spores with various antiseptics, and found that those spores lived and developed even after being placed in carbolic acid (one part in twenty) for one hundred and ten days. This, I think, is a very strong argument that neither oil nor fat of any kind should be used when the full action of an antiseptic is required.

Of course, I am aware that all the best authorities recommend strong ointments, mercurial or otherwise, though for a very different reason from what I have been describing. They care little or nothing about the antiseptic action, so long as inflammation of the follicle, more or less severe, be produced. The spores are said not to live in inflammatory products (Thin). But surely cases are not uncommon in which the disease is transplanted to healthy parts by means of the discharge. I have seen a case in which croton-oil was used to a single patch, and in a short time the head was covered with small centres of infection. In this case the spores were carried in the discharge. And, again, have not all the old chronic cases we see in practice—some of them of four or five years' duration—been cases treated by constant attacks of inflammation, and yet with the result that spores have been found with ease? My view is that to produce inflammation of a slight kind is useless; and that a severe kind is unjustifiable, on account of the risk of destroying the follicles altogether, and producing baldness.

To return to the question of fats; if fat of any kind from without protects the spores, as Koch asserts, the natural fat or sebaceous matter must have a similar effect. For this reason I have tried to remove the fat by means of ether, and have abstained from using ointments or oil in the treatment. I wash, or more strictly daub, the patch each morning with ether, rectified spirits of wine, and thymol, in the following proportions: ether, five drachms; rectified spirits of wine, two drachms and a half; and thymol, half a drachm—applying during the day glycerine with a very small trace of perchloride of mercury. Petroleum may be used in place of the ether and spirits. One drachm and a half of petroleum-oil takes up five grains of thymol. The ether or petroleum is of

greater value than would at first sight appear, and for the following reason. There is a disease of the scalp, known as *seborrhœa sicca*, the chief characteristic of which is the falling out of the hair. This is caused by the absence of the natural fat in the sebaceous matter. It is cured by stimulating the glands to action, and by adding fat artificially. In the ringworm patch, we want the diseased hair to fall out; and by producing a condition similar to *seborrhœa sicca*—that is, by making the part very dry—we can actually produce this effect. Instead, therefore, of epilating by means of forceps—which is useless, as the hair breaks at the neck of the follicle, leaving the diseased part behind—we can epilate by dissolving the fat, and thus loosening the hair in this way, we can in a few days remove all the broken and diseased hairs.—Malcolm Morris, F.R.C.S. Ed., in *British Medical Journal*.

BILLROTH'S OPERATIONS.—It is no wonder that Billroth does remarkable operations. In the first place, he is responsible to no one; there is nobody to question him and to ask, why do you do this or why do that? The patient has not a word to say in the matter. If Billroth determines to do an operation, that is the end of it; he is supreme. If the patient recovers, all right; if he dies, all right; not a particle of difference either way. I do not know if he even has any particular satisfaction in the recovery of the patient; it all lies in the fact of having done the operation. In the second place, Billroth has been first professor for years. He has the most abundant material of all classes, qualities and kinds. He does all kinds of surgery, including everything relating to female generative tract. There is no specialty of gynecology of any consequence here. There is not a day in the year, and has not been for years, that Billroth has not done major operations. I do not mean amputations of limbs or resection of joints—he would not look at such a thing. Why! he whips out a goitre as a sort of by-play while the patient is being etherized. To take out a tongue is easy for him, and he ties the lingual arteries on both sides with the utmost ease. So exceedingly familiar is he with the topographical anatomy of the body, that he rarely uses a director, but cuts right down to the place. He stops at nothing. The other day he was removing a cancerous ovary which was found to be adherent to the bladder and part of the small intestine. Does he stop? No! He cuts out a section of the bladder, stitches it up, cuts off seven inches of the intestine, stitches the ends together, removes the growth, closes the wound, and the woman recovers. I saw a man in the ward with a cancer of the stomach at the pyloric end, and after opening the abdomen, he found the disease so extensive, involving so much that he could not remove the growth at all. Does he close up the wound? Not he! He cuts down to the healthy gut, snips it off, cuts

a hole in the healthy part of the stomach, stitches the gut to it, and the man is getting fat. Now I say that, to be sure, they are wonderful operations; but why shouldn't they be? Billroth has attained this boldness and amazing skill in surgery by easy stages and after years of daily operating. Another thing, if he proposes doing an operation a little new or out of the way, he has one cadaver or a dozen to experiment upon, if he wants them, at any time or hour of the day. There are twenty to thirty bodies in the pathological rooms every morning.—*Dr. McClelland in the Philadelphia Med. Times.*

OSSEUS TISSUE FORMED FROM TRANSPLANTED BONE-MARROW.—Prof. Bruns, of Tübingen, reports (*Arch. für Clin. Chir.*, Bd. xxxi., Heft. 3), the results of some experiments he has lately made on animals, with the object of determining whether portions of transplanted bone-marrow can give rise to the formation of deposits of true osseous structure. The Professor states that the animals best suited for experiments of this kind are young dogs. A portion of the shaft of the femur or tibia is resected, and the marrow contained in this resected fragment, removed in an unbroken cylinder. Portions of this cylinder are then inserted into fresh wounds on the breast or back of the same animal, either into the subcutaneous fat or in a superficial part of the muscular layer. The wounds are then carefully closed by means of sutures.

The following changes, it is stated, take place in each instance of successful transplantation: A diffuse swelling is at once formed, which speedily begins to diminish, and is replaced about the fourteenth day by a movable nodule, in which bony tissue already exists in scattered foci. By the twenty-fourth day, foci have usually amalgamated into a single piece of bone. Microscopical examination proves that the nodule, in its early stages, is composed of osteoid tissue, cartilage, and newly-formed osseous tissue, and that the fully developed hard mass consists of true bone.

These experiments, Professor Bruns asserts, prove that bone-marrow, completely separated from its connection with bone, and transplanted under the skin of the same animal, at a remote part of the body, may give rise to the formation of bone and cartilage. The swelling at the seat of transplantation ossifies in part directly and in part by the conversion of cartilage and osteoid tissue into hard bone. The same process takes place in the formation of both the inner and outer callus after fracture; and it may be assumed that bone is formed from the inner surface of the periosteum. It is held by Professor Bruns that in each instance the osteogenetic function is due to the same elements, namely to osteo-blasts, which exist in the inner periosteal layer and are scattered amongst the elements of bone-marrow, particularly in young animals. Professor Waldeyer, of Strasburg, who

has examined these specimens, agrees in the view of the part played by the osteo-blasts in the ossification of marrow, and is not disposed to admit any participation in this process of leucocytes of the marrow, wandering leucocytes from the blood, metamorphosed fat cells, or newly-formed, spindle-shaped connective tissue cells.—*Lond. Med. Record.*

TREATMENT OF ABSCESS OF THE LIVER.—Dr. Randolph Winslow, in *Annals of Anatomy and Surgery*, contributes an excellent article on this subject, and closes his paper with the following conclusions:

The following summary represents the results of my investigations in regard to the surgical treatment of abscess of the liver:

1. The liver should always be aspirated in a case of suspected abscess, in order to verify the diagnosis.
2. Many small, and a few large abscesses, have been cured by one or more aspirations; hence this method should always be employed at the first exploration, and we should then wait until it refills. If the pus collects slowly and in small amounts, it may be again aspirated; if quickly, and in large quantities, aspiration is not to be relied upon.
3. Incisions should be made into the abscess cavity at the most prominent portion of the tumor, whether in an intercostal space or not; and irrespective of the presence or absence of adhesions.
4. Rigid antiseptic precautions add much to the safety and certainty of a successful result.
5. When Listerism is impracticable, good results will be generally obtained by simple incision, or puncture by a trocar and canula, followed by the introduction of a drainage tube, and the daily use of carbolyzed injections.
6. Any of these methods are preferable to leaving the case to nature.—*American Medical Weekly.*

CONNECTICUT MEDICAL SOCIETY AND THE NEW YORK CODE.—Resolutions were offered severely condemning the action of the New York Medical Society with regard to consultations, but they were laid upon the table after a brief discussion. The objection to action was that, after some rather severe quarrels, the society has at length been for several years harmonious; that the discussion of these resolutions would lead to hard feelings, and recrimination was inevitable. The wisest course was to manage its own affairs and leave its neighbors alone. A committee of three, however, was appointed to report upon the suggestions of the President concerning a revision of the Code of Ethics.

The St. Louis Medical Society has been considering the question of amending their code, so as to permit consultations with homeopaths.

The meeting of the Michigan Medical Society took no action in regard to the matter.

The Virginia Medical Monthly is in favour of the new Medical Code.

THE MEDICAL STUDENT'S PRIMER.—What place is this? This is the Pathological Society. How does one know it is the Pathological Society? You know it by the specimens and smells. What does that gentleman say? He says he has made a post-mortem. All the gentlemen make post-mortems. They would rather make a post-mortem than go to a party. What is that on the plate? That is a tumor. It is a very large tumor. It weighs one hundred and twelve pounds. The patient weighed eighty-eight pounds. Was the tumor removed from the patient? No, the patient was removed from the tumor. Did they save the patient? No, but they saved the tumor. What is this in the bottle? It is a tape-worm; it is three-quarters of a mile long. Is that much for a tape-worm? It is, indeed, much for a tape-worm, but not much for the Pathological Society.—*Medical Record*.

DIGITAL EXPLORATION OF THE BLADDER.—Sir Henry Thompson's recent proposal to examine, by means of the finger, obscure and chronic disease of the bladder, hitherto inexplicable by sounding, etc., to which we not long ago called attention, is yielding valuable results. A patient who had suffered severely from cystitis and bleeding during three years, and without ascertained cause, was sent to Sir Henry from the country about three months ago, when the bladder was explored by the finger, after dilatation of the urethra, the patient being a lady. The outline of a considerable poly-poid growth from the back of the bladder was easily defined, and at once removed by blunted forceps. The patient is making a rapid recovery. There has been no cystitis or bleeding since, in spite of exercise, walking and driving, daily.—*The Lancet*.

DISCHARGE OF GALL STONES THROUGH THE ABDOMINAL WALL.—In *Gaillard's Med. Journal* for April, Dr. H. Humfreyville reports a case of this kind. The patient, three years before, suffered what was then called "inflammation of the bowels," and since then had noticed a soreness just below the umbilicus, where a pyriform tumor existed. This finally opened and discharged a number of gall stones, varying in size from a chestnut to a pea. Beyond some tenderness in the umbilical region, the patient retained excellent health. A similar case was reported by Dr. Augner, of France, the patient also making an excellent recovery.

NERVINE AND ANTI-SPASMODIC.—The following is a favorite prescription in the Hospital for Chest Diseases, London. It is also useful in epilepsy, dysmenorrhœa, chorea, hysteria, and the like:—

R—Potassii bromidi,	grs. x.
Tinct. conii,	gtt. xxx.
Tinct. val. ammoniæ,	gtt. xx.
Aquæ camph.,	3j.

BLISTERS IN YOUNG CHILDREN.—M. Archambault (*Journal de Méd. et de Chir. prat.*, Jan. 1882, p. 14) points out that blisters should not be used as routine treatment in children, as they are always painful and often harmful. In a child of a year old, the blister should not be left on longer than one hour; at four or five years, four hours is enough. The blister should be covered with a piece of oiled silk paper. Blisters should never be applied to cachectic children or to those with a tendency to skin eruptions; but above all, blisters should be avoided in diphtheria and croup, and at the terminations of scarlatina, measles, &c., as he has often seen extensive ulcers so caused. Blisters should not be applied posteriorly or to parts exposed to pressure.—*Birmingham Med. Review*.

PRESCRIPTION FOR MEMBRANOUS DYSMENORRHOEA.—Dr. Wm. H. Mussey, of Cincinnati, Ohio, in the *Transactions of the Ohio Medical Society*, 1879, gives the following prescription for membranous dysmenorrhœa, which we have once before published, but which we are requested to republish:

R—Pulveris guaiaci resinæ,
Terebenthinæ Canadensis, aa 3j.
Olei sassafras, f. 3ij.
Alcoholis, f. 3vij.

Mix. Macerate for seven days and strain.

Then add—

Hydrargyri chloridi corrosivi, ʒj.

Sig.: Take twenty drops in wine or sweetened water, night and morning.—*Virginia Med. Monthly*.

IODOFORM IN GASTRIC ULCER.—Dr. M. J. Redmond (*British Medical Journal*, May 6th, 1882), having observed the rapidity with which external ulcers heal under the influence of iodoform, gave a marked case of gastric ulcer three grains of iodoform three times daily, in pill form. The hæmatemesis which had been persistent up to the use of the iodoform diminished, vomiting ceased, pain and tenderness decreased, and within a month the patient had fully recovered. The patient was a young unmarried woman, so it is possible that there might be an hysterical element in the case.—*Chicago Med. Review*.

CHLORAL HYDRATE ON AN EMPTY STOMACH.—Dr. Clemens (*Alg. Med. Central Zeitung*), holds the administration of chloral upon an empty stomach to be irritational. Nocturnal administrations as an hypnotic, should be preceded by supper; in case of the presence of acid stomach or acid food, a solution of carbonate of soda should be taken. Patients using it should be instructed as to their diet. As a local application, glycerine and chloral. A saturated solution with glycerine is an excellent anodyne in severe toothache from dental caries.—*St. Louis Med. Record*.

THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science
Criticism and News.**

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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TORONTO, AUGUST, 1882.

This Journal has the largest circulation of any Medical Journal in Canada.

PREScribing DRUGGISTS.

Considerable discussion has recently taken place in the secular press on the subject of illegitimate prescribing by druggists, and we are much surprised to observe the course taken by our leading newspaper organs on this question. The controversy arose in consequence of a druggist in the city of Ottawa having been fined for prescribing for a patient contrary to the provisions of the Ontario Medical Act. The druggist in question was not only guilty of the very common offence of prescribing for a patient, but had the audacity to recommend and substitute his own preparation, for the prescription sent him by a legally qualified medical practitioner in that vicinity, to be dispensed. Although the papers have not had the boldness to defend the druggist for such a glaring abuse of his office, yet they preach inane homilies upon the right of every man and woman to prescribe for his fellow-beings in distress, and utter pitiful jeremiades over the great hardships to the public which must accrue if the poor druggist is not allowed to prescribe his simple remedies.

Druggists are like other people, some of them are conscientious and careful enough, and we have no particular fault to find with them even if they do occasionally prescribe some very simple remedy for an importunate individual. There are others, however, who are continually prescribing over the counter for all sorts of ailments—from teething or colic in children to the gravest forms of disease among both children and adults. If it were worth

while, or at all necessary, we could recount numbers of cases where persons have nearly lost their lives through this species of tampering with serious diseases; such as, for example, the prescribing of various forms of cough mixtures in inflammation of the lungs; strong cathartic pills in the incipient stage of inflammation of the bowels, trifling remedies in the various stages of syphilis and many other equally serious blunders. And so long as this practice of prescribing over the counter is permitted, such occurrences are to be expected. The druggist, although well enough qualified to dispense medicines, and posted also in regard to their action in health and disease, has no knowledge whatever of diagnosis and pathology—the very foundation-stones of practice of medicine. It is in this that the danger lies, and we cannot but express our regret that the leading newspapers of the day do not consider it a part of their duty to guard the lives of the people, and as far as possible prevent them from being tampered with by ignorant pretenders. We have often had occasion to deplore the fact that the secular press of this country is ever ready to defend quackery in medicine. It does seem to us inexplicable, but it is a fact nevertheless.

All respectable druggists will admit that only properly qualified medical men are competent to prescribe the proper remedies for the sick, and that druggists and other unqualified persons should as far as possible be prohibited from doing so. This is not at all a question of protection to medical men—they can take care of themselves—but it is a subject of great importance to the public who are as a rule unable to judge for themselves in such matters, or to discriminate between the skill of a chemist or an apothecary, and a properly qualified medical man in the treatment of disease. We have no patience with people who are continually crying out about the protection of the profession. Surely the Legislature had the general good of the public in view when the Act was passed. The public have much need of all the protection the law can give, not only from outside the profession—but, with shame be it said, from some of those who have found their way into it—but who have so far forgotten what is due to an honorable profession as to join the army of quacks that are preying upon the credulity and gullibility of the public.

FIRST YEAR'S PROFESSIONAL EXAMINATION.

The question of instituting a compulsory examination in elementary Anatomy and Physiology, at the end of the first year of professional study is now under discussion at the Royal College of Surgeons, England, the General Medical Council, the Royal College of Physicians, and elsewhere. The London *Lancet* for July 15th, in an article on the subject strongly recommends its adoption. The proposal to which a conference of the medical teachers agreed is to the following effect, viz.: that an examination in elementary Anatomy and Physiology, shall be conducted at the end of the first winter session at the various medical schools by the teachers of those schools, said examination to be conducted by means of written papers, and also orally or practically; and that no student shall be allowed to present himself for the primary examination for the membership of the College of Surgeons, until at least six months after passing this preliminary examination.

We are happy to be able to inform our transatlantic brethren, that two years ago the Ontario Medical Council adopted a resolution similar to the one proposed, making an examination at the end of the first year of professional study compulsory upon every student, such examination to be passed in the various medical schools, and the plan has been found to work well. Each candidate is required, before presenting himself for the primary examination of the college, to present with his lecture tickets a certificate of having undergone an examination at the school he has attended at the close of his first winter session, on elementary Anatomy, Physiology, Chemistry and Botany. At the time of its adoption by the Council it was urged by the representative of Trinity Medical College, and heartily supported by many members, that while this first year's examination would cost the Council nothing, it would be of great value to the students by keeping them at work from the beginning, just the period when many of them are disposed to waste precious time, and that it would prevent the tendency which prior to this was a growing one, to the straggling away of many members of the several classes before the courses of lectures were anything like concluded. The expectations of its promoters have been fully realiz-

ed. The examination has done much good and will yet do more, as the several schools take it up more thoroughly which they are sure to do. It is therefore gratifying to see that our brethren have adopted a resolution similar in spirit to the one above alluded to, so that hereafter all candidates will be obliged to present a certificate of having passed an examination on elementary Anatomy and Physiology at the close of the first session said examination to be conducted both by means of written papers and orally or practically, just the plan adopted and found to work so well in Canadian schools during the past two years. This resolution has the support of the principal teachers of the various schools in London.

THE TORONTO SCHOOL "ORGAN."

Our homœopathophobic contemporary has surely taken leave of its senses during the warm weather. In the May issue it published the statement that our adverse criticism of Dr. Oldright's appointment as chairman of the Ontario Board of Health arose from disappointed ambition, and having been taken to task for such an unwarrantable statement, the "organ" now says editorially, that "the principal motive which inspired the articles in the LANCET was personal enmity," inasmuch as Dr. Oldright had beaten us in the contest for the Senate of the Toronto University several years ago. This statement is not only exceedingly silly, but is absolutely untrue, and shows how anxious the "organ" is to weaken the force of our criticism by trying to make it appear as a "purely personal attack" on the chairman. There were three vacancies in the Senate, and four candidates in the field, not one of whom was individually pitted against any one of the others. Besides, we can easily prove that we asked many of our friends to vote for Dr. Oldright, as one of the candidates. It is also really touching to see the fatherly interest our contemporary has recently taken in our behalf, and in behalf of the LANCET. We cannot but feel grateful for the kindly advice so gratuitously tendered, and are inclined to wonder how we managed to reach the position we have attained in the support and estimation of the profession before it came to the rescue. But while thanking it for its very kind interference, we may be permitted to say that we intend to manage our own

business in our own way, and to continue the same course which has heretofore borne such good fruits, that we are enabled to say that we have "the largest circulation" of any medical journal in Canada. This statement, from the manner in which it has been alluded to on several occasions, seems to seriously wound the tender susceptibilities of our hyperæsthetic contemporary. We sincerely regret that it should so far misapprehend our object in making this statement. We have no desire to flaunt our "large circulation" in the face of our contemporary, but make the statement simply as a matter of business, with a view to increase our advertising patronage, which is a profitable part of the management of a journal of good circulation.

We apologize to our readers for occupying space with a matter which is almost purely personal. We do not feel ourselves bound to correct all the false statements made concerning us by our contemporary, nor to defend our mode of doing business, and would say that this discussion will end here, so far as we are concerned, as we do not consider such controversy either dignifying to those concerned or edifying to our readers.

VITAL STATISTICS

An announcement appears in the last issue of the *Canada Gazette*, to the effect that each of the electoral districts of the Provinces of Ontario, Quebec, New Brunswick, and Nova Scotia have been constituted health districts for the purpose of statistics under the Act respecting Census and Statistics.

We understand that the sum of \$10,000 was placed in the estimates and voted by Parliament last session for the collection of Health Statistics, and we presume this division of the Provinces is in pursuance of some scheme to meet the repeated request of the Canada Medical Association, representing the profession of the Dominion, that some comprehensive plan should be adopted to collect and utilize the vital statistics of the Dominion. Of course the sum allowed is quite inadequate for any efficient and beneficial organization. It is to be feared that the limited means for the purpose, may lead the Government to undertake the work on what is sometimes called a cheese-paring plan. Should failure result in such a case, it will be due

entirely to this fact. The value of vital statistics to a nation, can no longer be questioned when properly dealt with, and the fact is recognized by all civilized nations. As we are as yet uninformed as to the nature of the contemplated machinery for the Dominion, we can offer no opinion as to the chances of success. Above every other consideration, it is most important that the chief officer of the Bureau of Health should possess the best qualifications the medical profession of the country can supply. To secure a suitable person, the salary should be at least equal to the income a first-class practitioner can command. We trust the Government will succeed in securing the services of a properly qualified person, who will command the respect of the profession and the public. We have in our mind one, who we believe would ably fill the position; at least among the profession, no one would meet with more general and hearty approval. We refer to Dr. Canniff of Toronto. He has already, for a brief period, served the Department of Agriculture; and indeed, it was understood from statements made by Sir J. A. Macdonald to a deputation of medical men which waited upon him in the winter of 1880-81, that the services of the person referred to would be retained to carry into effect the Act relating to Vital Statistics as soon as the Census had been taken. We may be permitted to say that we think the Government should, without further delay, meet the wishes of the profession and the requirements of the country in this respect in a liberal spirit.

CANADA MEDICAL ASSOCIATION.—The annual meeting this year will take place in Toronto, commencing Wednesday, the 6th of September. We anticipate a large attendance, as, in addition to the interest in connection with the Association itself, there will be the Industrial Exhibition, which opens the same week. Last year only a few Ontario medical men found it convenient to attend the meeting at Halifax; but those who did experienced no regret, as the meeting was very successful, except in point of numbers. We have not learned as to the number and character of the papers to be read at the approaching meeting. We shall be glad to welcome the President-elect, Dr. Fenwick of Montreal, who will no doubt ably discharge the duties of his office. And we are glad to know that

the work belonging to the Secretaryship is in such good hands as those of Dr. Osler of Montreal.

We are able to state that the profession of Toronto will extend a cordial welcome to the members of the Association, and endeavor to make the occasion a pleasant one from a social point of view. Arrangements have already been made to hold a reception in the rooms of the Educational Department, which have been kindly placed at the service of the Committee of Arrangements by the Minister of Education, and other festivities will mark the occasion. The City Council has kindly granted the use of their Council Chamber for the meetings of the Association.

COLLEGE OF PHYSICIANS AND SURGEONS OF MANITOBA.—At a meeting of the profession held June 13th, the following gentlemen were elected members of the Council:—Dr. J. H. O'Donnell, Dr. J. S. Lynch, Dr. A. Codd, Dr. D. Young and Dr. A. H. Ferguson.

The new Council met on the 20th of June and the following officers were elected:—Dr. Lynch, President; Dr. Young, Vice-President; Dr. Codd, Treasurer; Dr. A. H. Ferguson, Registrar.

Any graduate in Medicine in Her Majesty's Dominions is recognized by the Council and may be admitted to practice on payment of a registration fee of \$10. American graduates and undergraduates are admitted by passing a satisfactory examination before a board of examiners appointed by the Council.

CHRONIC BRONCHITIS (CORRECTION).—In our last issue, on page 351, will be found a prescription for chronic bronchitis, in which the proportion of Amm. Carb. is put down $\bar{3}j$. It should be $\bar{5}j$. Dr. J. Carrick Murray, senior medical officer of the Northern Counties Hospital for Diseases of the Chest, Newcastle-on-Tyne, Eng., who very kindly called our attention to the error, recommends the following as an improvement upon our prescription.

R—Amm. Carb.,	$\bar{3}j$.
Spts. Amm. Arom.,	
Spts. Æth. Nit.,	aa $\bar{5}ss$.
Syr. Scillæ,	$\bar{3}j$.
Tr. Camph. Co.,	$\bar{3}jss$.
Vin. Ipecac.,	$\bar{5}ij$.
Infus. Senegæ,	ad $\bar{5}vij$.—M.

SIG.—A tablespoonful every four hours.

PERSONAL.—Dr. Osler, of Montreal, has been elected an honorary member of the New York Pathological Society.—Dr. Henry Howard, of Longue Pointe lunatic asylum, is about to publish a work on insanity.—Dr. A. Jukes, of St. Catharines, has removed to Qu'Appelle, N.W.T. Dr. O. C. Edwards, of Montreal, has also located there.—Dr. R. A. Reeve will be out of the city during the month of August, on a holiday trip to the North-West.—Dr. A. M. Rosebrugh, of Toronto, is spending his summer holidays in Minnesota and the Canadian North-West Territory.

PERSONATION AT MEDICAL EXAMINATIONS.—We learn from the London *Lancet* that a case has just been heard in Dublin, before Mr. Curran, Q.C., in which a student of that city was summoned on a charge of attempting to induce a gentleman, Dr. Norris, to personate him at a Dublin examination, and offering him in the first instance £150 and afterwards £100. The Court issued a warrant for his arrest. One or two cases of this kind actually occurred in this city, but the fraud was discovered in time to prevent its consummation.

NEW TREATMENT OF PRURITUS.—Dr. Steele, of Denver, Col., communicates to the profession, through the *Lancet and Clinic*, what he considers a very reliable acquisition in the treatment of that troublesome affection, pruritus vulvæ. It may be applied to pruritus ani as well. The remedy is quinia sulphate, rubbed up with only sufficient lard to hold it together. The nearer you get the full strength of the quinia the more efficacious it will prove. Apply freely and thoroughly. It has proven a specific in his hands.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS.—We are pleased to state that Dr. J. A. Grant of Ottawa has been recently elected a Fellow of the Royal College of Physicians, London. He received the membership degree in 1864. We congratulate the Dr. upon his election, a distinction to which he is fully entitled. We believe this is the first time this distinguished honor has been given to a Canadian.

The death of Prof. Spence of Edinburgh, at the age of 70 years, also that of Dr. Peacock, St. Thomas' Hospital of London, England, at the same age is announced in our British Exchanges.

APPOINTMENTS.—Drs. Geo. Wright and A. H. Wright, have been appointed members of the attending staff of the Toronto General Hospital, and Dr. J. E. Graham has been appointed on the pathological staff. Dr. J. A. McDonald has been appointed Resident House Surgeon, Montreal General Hospital; and Drs. T. N. McLean and W. T. Duncan, have been appointed Resident Medical Officers.

ANÆSTHETIC MIXTURES.—The Vienna mixture, used in 8,000 operations without accident, consists of three parts of ether and one of chloroform; Billroth's, three of ether, one each of chloroform and alcohol. The committee of the Medico-Chirurgical Society, of Great Britain, recommends one part, by measure of alcohol, two of chloroform, and three of ether.

ROYAL COLLEGE OF SURGEONS, ENG.—Mr. John Marshall, Mr. H. Power, and Mr. Croft, have been elected members of the Council of the Royal College of Surgeons, Eng. The two former were re-elected. At a subsequent meeting Mr. Spencer Wells was elected President, and Mr. John Marshall and Mr. Cooper Foster, Vice-Presidents, for the ensuing year.

NOTICE.—The New Medical Register of the College of Physicians and Surgeons of Ontario is about to be published. Members of the College are requested to see that their addresses are correctly given; any additional qualification may be added on payment of a fee of two dollars (see advt.)

LIGATURE OF THE ARTERIA INNOMINATA.—Mr. Thompson, of London, Eng., has recently applied the ligature to the innominate artery for the cure of aneurism. The case is doing well at last accounts, having reached the 34th day after the operation.

LONDON MEDICAL SCHOOL.—We have received the first annual announcement of the Medical Department of the Western University, London, Ont. The first course of lectures will commence October 3rd, 1882.

R. J. B. Howard, M.D., and R. Levi, of McGill College, Montreal, have successfully passed the primary examination of the Royal College of Surgeons, Eng.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY for August. New York: D. Appleton & Co.

This ably conducted periodical continues to sustain its conceded high reputation, as a vehicle of instructive and profitably entertaining matter, in the wide range of modern science. The August number, now before us, exhibits no falling off in either the variety or the substantial value of its content. It presents no less than fourteen articles on subjects of inviting interest to all intelligent and enquiring readers, and in addition to these, under the titles of "Entertaining Varieties," "Editor's Table," "Literary Notices," "Popular Miscellany," and "Notes," we have, in smaller type, and closer lines, a truly useful miscellany.

The article by the distinguished Benjamin Ward Richardson, M.D., F.R.S., under the designation of "National Necessities and National Education," is of such sound practical merits as to claim the deferential consideration of the entire body of educationalists, of all parents or guardians of the young, advisers or formulators of school regulations, and framers of school statutes.

Dr. Richardson has, on all available occasions, declared his hostility to the modern and far too prevalent system of school cramming. It would appear that in England, as in Ontario, a premium is offered to those who exhibit the highest success in this senseless and deplorably profitless art. An able and experienced lady, long engaged in teaching, speaking of the hurtful physical results of existing school requirements, says she had "found that to obtain the school grants, the children are so constrained as to exclude the exercises that are needed for their bodily development." Surely a more potent temptation than this mode of earning the *school grants*,—in other words the wages of the teacher,—could hardly be devised by the most determined, or the most stupid, devastator of both bodily and mental health.

Dr. Richardson speaks of the present system in the following decided terms:—"The present system is not only a violation of physiological, but also of psychological law. The powers of receptivity of the minds of children of different ages have been tested experimentally, with as much care as physicists take when they are treating in

their experiments on the relationships of ordinary matter to force. Certain brains can take in so much, and no more, according to age. The capacity grows with cultivation and skilful teaching, no doubt, but it *must be permitted to grow*. In the very young a lesson of a minute may be all-sufficient. Later, of three minutes, five, ten, fifteen, and so on, to one hour, two, or three. But to this there is a limit, and it is probable that, with the best scholar of primary school age, the powers of receptivity rarely extend beyond a period of two hours and a-half of direct teaching. Teachers of various districts, and of different countries, have testified in respect to this point, and while they have explained, from direct observation, that the receptivity varies in different children, according to difference of temperament, physical health and build, as might very well be expected, the receptivity at one time, in all children, ceases at the end of three hours."

HOMŒOPATHY: WHAT IS IT? By Prof. A. B. Palmer, M.D., Ann Arbor, Mich. Second Edition. Detroit: G. S. Davis. Toronto: Willing & Williamson.

We beg leave to acknowledge the receipt of the above work from the publishers. Recent treatment of the subject by prominent societies and individuals—for example, the action of Sir Wm. Jenner and Dr. Quain in the case of the late Earl of Beaconsfield, with the action of the British Medical Association in the premises; the reference to the subject in the new code adopted by the New York State Medical Society; the article by Dr. Palmer in the March number of the *North American Review*, etc.—attach additional interest to "Homœopathy—What Is It?" at this particular time.

MEMORANDA OF PHYSIOLOGY. By Henry Ashby, M.D. (London), Physician to the General Hospital for Sick Children, Manchester, etc., etc. Third edition, thoroughly revised, with additions and corrections, by an American Editor. New York: Wm. Wood & Co., 1881. Toronto: Willing and Williamson.

This is one of Wood & Co.'s Memoranda Series, and is really a very good short compend on the subject. All these works have their proper place in a medical library, and this one will be found very useful, especially where a student wishes to run over the points of physiology in a short time.

A TEXT-BOOK OF PHYSIOLOGY. By M. Foster, M.A., M.D., F.R.S., Trinity College, Cambridge. Second American, from the third revised English edition. Edited by Ed. J. Reichert, M.D., Philadelphia: H. C. Lea's Son & Co. Toronto: Hart & Co.

This excellent work is already favorably known to the student of physiology. The most important changes in the present edition by the author, are to be found in the section on muscle and nerve. The remaining changes are not of great importance. The American editor has made some few changes and additions which will enhance the value of the work to American students. A number of new cuts have been introduced instead of the old ones, and others added. The present work will be found to embody all the recent advances made in experimental physiology.

MANUAL OF OBSTETRICS, by A. F. A. King, M.D., Prof. of Obstetrics in the Columbian University, Washington, D. C., with 58 illustrations. Philadelphia: H. C. Lea's Son & Co. Toronto: Willing & Williamson.

This work is much of the same character as Meadow's Manual, so well known to medical students. It is probably a little more complete in detail than the latter, and is of course more recent. It is, as the author states in his preface, a compilation from Leishman, Playfair and Lusk. We regret, however, that he did not adhere to the old terms "ante-partum" and "post-partum," instead of the horrid Anglicized words, Antepartal, and Postpartal, which fall so harshly on the ears.

Births, Marriages and Deaths.

At the Asylum, London, on July 7th, the wife of Dr. Millman, of a daughter.

On the 19th ult., Dr. Alexander Robinson of Hamilton, to Alice Maud, second daughter of the late Jacob Pingle, Esq., of Markham.

On the 9th of June, Dr. Henry Edward Bissett, of Port Hawkesbury, N.S., in the 40th year of his age.

On the 9th of June, Dr. Samuel Blackwood, of Pakenham, Ont., aged 70 years.

On the 28th of July, Dr. John Salmon, of Simcoe, aged 52 years.

THE

2456.

CANADA LANCET;

A MONTHLY JOURNAL

—OF—

MEDICAL AND SURGICAL SCIENCE

CRITICISM AND NEWS.

EDITED BY

J. FULTON, M.D., M.R.C.S. ENG., L.R.C.P. LOND.

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Original Communications.

TONSILLOTOMY AND ITS COMPLICATION BY HÆMORRHAGE.*

BY N. A. POWELL, M.D., EDGAR, ONT.

A three-fold purpose has induced me to present, at this meeting, certain points regarding tonsillotomy and one of its occasional complications. To give you in brief a history of the case which first directed my attention to this subject, to bring out in discussion some of the experience at present stowed away in the gray matter of the cerebral convolutions of the members of this association, and with such help to reach sound conclusions as to what the treatment of the complications in question should be, have been the objects which I have had in view in the preparation of this paper.

At the last meeting of the American Laryngological Association, its secretary, Dr. George M. Lefferts, of New York, discussed "The Question of Hæmorrhage after Tonsillotomy," and classified its frequency and severity thus:—

- 1st. A fatal hæmorrhage is very rare.
- 2nd. A dangerous hæmorrhage may occur.
- 3rd. A serious one, serious as regards both possible, immediate, and remote results is not very unusual, and
- 4th. A moderate one requiring direct pressure, and strong astringents to check it is commonly met with.

Of the first or fatal class, the writer had not been unfortunate enough to meet with an example. Other surgeons have, however, placed on record a small number of cases fatal from hæmorrhage following the excision of the pharyngeal tonsils, while a much larger number of deaths have been caused by the loss of blood succeeding operative procedures, other than amputations, in the tonsillar region.

Read before the Ontario Medical Association, June 7, 1882.

Coming within the *second* class, two cases have occurred in the practice of Dr. Lefferts from a total of about 500 operations. Both are recorded in his paper. The history of the first I shall read to you since I am able from the standpoint of the patient to add to it somewhat. In the fall of 1874, while at Demilt Dispensary attending the throat-clinic, held on alternate days by Drs. Lefferts and McBurney, I requested the former to remove my tonsils, as they were subject to recurrent attacks of follicular inflammation. I give you in his language what then occurred.

"I amputated both excessively hypertrophied tonsils with the tonsil bistoury. My incisions, I may say here, were made with care, and were such as I had made many times before in other instances. A few moments after the operation, an inspection of the throat having shown no excessive bleeding, I left the dispensary, where the operation had been performed, and my patient, who was using an ice-water gargle. I did not see him again for several hours, and then found him almost exsanguinated and pulseless. Profuse bleeding commenced almost immediately upon my departure, occurring very suddenly. The flow was so rapid that the patient could not clear his mouth of it. Blood passed into the stomach, giving rise to repeated attacks of vomiting, and into the larynx, causing strangulation. As described to me, his condition was for a time a dangerous one. All the resources at hand at the moment that suggested themselves to the doctors present, except pressure, were tried without avail. The hæmorrhage persisted. I was sent for, but not found, and finally my colleague, Dr. McBurney, fortunately reached the case some three hours after the commencement of the bleeding. He at once did what should have been done before, cleared all blood clot out of the pharynx, differentiated the source of the hæmorrhage and applied direct pressure over the spot on the right side from whence it was found to come. In a short time it had ceased. I arrived later, and found my patient stretched upon a bench, as I have said, white, bloodless, and almost pulseless. After an anxious night spent with him where he lay, he was carried in the morning to his home, and slowly convalesced during the following month. There was at no time a recurrence of the bleeding."

In the removal of the right tonsil, the one that gave rise to the trouble afterwards, Dr. Lefferts was

assisted by a surgeon who happened to be present. This latter gentleman held the vulsellum forceps in order to free Dr. L.'s right hand for the use of the bistoury. I noticed that as the section was made strong traction was also made upon the tonsil, and this must have placed on the stretch the tissue last divided, which was the lower part of the gland. In this part lay the artery—probably the tonsillar branch of the ascending pharyngeal—from which the subsequent bleeding occurred. Its mouth opened deep in the sulcus, between the tongue and the stump of the tonsil, and it was so obliquely divided that the contraction and retraction by which natural hæmostasis is effected could not take place. Possibly this vessel was enlarged at the expense of the others supplying the gland; possibly also the indurated tissue through which it ran prevented its closure. About half-an-hour after Dr. Leffert's hurried departure to fill his next engagement, the bleeding became very free. I then asked some of the physicians from other departments of the dispensary to look at the wound. They did so and one prepared for me a tannic acid gargle as advised by Mackenzie, while another immediately after its use applied to the part a solution of the persulphate of iron with a brush. Between them they filled the fauces and pharynx with ink manufactured on the spot; a third gentleman then began giving me ten grain doses of quinine, while another spoke rather indefinitely of the hypodermic use of ergotine or the ligation of the carotid. The fifth could only offer his regrets that he had to leave at once, as he "wanted to wait and see Lefferts stop this." These gentlemen were all educated and skilled physicians in their own specialties, and all but the last seemed anxious to be of service, but none of them remembered the simple surgical fact that direct pressure on the mouth of any bleeding vessel will control the loss till other and more permanent means of checking it may be adopted. The flow being rapid I became faint and exsanguinated in a short time, and in the opinion of those better able than myself just then to form a correct opinion, I could not have survived another hour without the help which Dr. McBurney afforded. It was estimated by several gentlemen present that the loss of blood amounted to between six and seven pints. If either my friends, the throat specialists, or a good practical surgeon had been present when it began,

it would not probably have reached as many ounces, nor would the general condition have become a dangerous one. Since that time I have frequently had occasion to perform tonsillotomy, and have met with nothing more unsatisfactory afterwards than the loss of an occasional fee for so doing. I have knowledge, however, of nine cases besides my own in which a fatal result was all but reached. One of these occurred in the practice of an old fellow-student of mine who now fills a chair in a western college. In this case the doctor left a student to watch his patient, and was recalled in haste two hours later. He found it necessary to apply pressure with a sponge on a holder for many hours, and has stated that without the recollection of my experience and treatment to guide him he would have been at a loss to know what to do.

From the statistics which I have at hand, based chiefly on the practices of leading surgeons, I am disposed to think that a dangerous degree of hæmorrhage occurs in about 1 per cent. of all tonsillotomies. If with proper after treatment it is thus frequent, may we not consider its risks to be greater in connection with that slap-dash and happy-go-lucky surgery with which even in Ontario we are not altogether unacquainted? We know how often some physicians meet with post-partum hæmorrhage, and are apt to connect this frequency with a faulty or careless treatment of the third stage of labor. That obstetrician will see least of it, probably, who has its dangers and its prevention most constantly in his mind. The same reasoning will apply to this form of hæmorrhage. With the conviction that the liability to hæmorrhage from the stump of an amputated tonsil will be lessened by the right performance of the operation that may cause it, I submit without arguments the following conclusions for your adoption or amendment:—

The surgeon who proposes to remove a tonsil should have at hand a strong and perfectly manageable light such as is obtained from a student's lamp and a forehead protector of four inch diameter and short focus. He should not be dependent upon the kitchen cupboard for a part of his armament, but should have a good tongue depressor, and this is almost the same as saying that he should have Turke's model, as for any operation on the back of the throat it is the only good one.

He should use the tonsillotome preferably for children, and especially if ether be not given. It

the part to be removed be prominent he should use this instrument for adults also, and should prefer McKenzie's or Hamilton's models, which cut by propulsion to any of the forms in which a sickle-shaped knife makes the section as it is being retracted.

He should use the vulsellum forceps or double-hook and probe-pointed bistoury for all cases in which the gland is sessile, or in which a particular portion of it is to be excised. In operating he should stand before the patient, seize the left tonsil and cut from above downwards, so as to remove all that projects beyond the anterior pillar of the fauces. Then, standing behind the patient, he should remove to the same degree the right gland by cutting from below upwards.

Bearing in mind the manifold risks of operating on even small inflamed parts he should select a period of quiescence for the amputation, the exceptions to this rule being: first, that class of cases in which the gland is very small and flat between the catarrhal attacks upon its secreting surface; and second, the rare condition of actual danger to life from combined hypertrophy and inflammation.

The surgeon after a tonsillotomy should not lose sight of his patient for several hours, but should make frequent and careful inspection of the throat. He should remember that, especially in children, blood may pass into the stomach and give no external sign till blanching of the face or faintness shows its loss. Should this examination reveal actual hæmorrhage in unsafe amount he should resort at once to direct pressure, either with the fingers or a sponge on a firm holder. After this has been some time applied he should examine for bleeding points, and if found they should be caught and twisted. Cold, in the form of ice-water or ice in substance may be made use of, but it is better to avoid the application of the styptic preparations of iron or other astringents. In the rare event of pressure, torsion, and cold being, when properly applied, insufficient, the ligating of the external carotid artery, and this also failing, of the common trunk may be taken into consideration.

A CASE OF ECLAMPSIA.*

BY THOS. T. S. HARRISON, M.D., SELKIRK, ONT.

I bring this case before the Association, not to show my skill in treating it, or to boast of the

favorable result of the treatment, but because the case made a profound impression on me, and because I have often asked myself if I could have done better had I taken a different course. We have a right to pride ourselves on our successes, but my experience is that we are taught more by our failures.

On the 8th of last month, I was called at midnight to see a patient some eight or nine miles distant—was told it was a case of confinement and that the woman was very bad. I took with me my instruments, chloroform, ergot, and my ordinary pocket-case. I got there between one and two a.m., and found that the patient—a primipara—had been delivered before I was sent for, having had a very easy and short labor, the nurse—a neighbour's wife—who attended her, telling me that she had not had more than a couple of real labor pains, and that she was over it before they could get a messenger ready to send for me. After her delivery she said she was pretty comfortable, but had a slight headache and pain in the stomach. Without the slightest warning she went into convulsions. When I saw her she had just recovered from a convulsion, the seventh or eighth. There was no œdema, nor was there any history of swelling or puffiness; the placenta was retained. I made an examination, and found that the placenta was still in the uterus. Thinking it likely to be adherent, to save the shock to the nervous system that might ensue if I had to pass the hand into the uterus, I administered chloroform. I removed the placenta by just hooking my finger behind it without the slightest trouble. It lay loose in the uterus. I ceased giving chloroform, and she lay easy for some fifteen minutes, when, with a groan, she went into another convulsion. As soon as possible I gave her about half a grain of morphia by the stomach and resumed the chloroform, keeping her under its influence about an hour. The pupils were contracted, the lids closed, but on raising the lids, under the influence of light the pupils rapidly dilated, and oscillated between dilatation and contraction, but on the approach of a convulsion they became widely dilated. I gradually withdrew the chloroform, but long before she came from under its influence she had a severe fit, and another quickly followed. I now sent for my hypodermic syringe, bromide of potassium and chloral. In the mean time I bled her to about

*Read before the Ontario Medical Association, June 8th, 1882.

thirty ounces. She was quiet and breathed easily for some three-quarters of an hour after bleeding, without chloroform—before bleeding the breathing had been growing slightly stertorous—when she again went into convulsions. I now kept her under chloroform until the return of my messenger, when I injected about one-third of a grain of morphia hypodermically, and by the rectum a drachm of bromide of potassium with half a drachm of chloral hydrate, gave chloroform upwards of an hour and a half, when, upon gradually withdrawing it, the convulsions returned in an aggravated form.

I now kept her under its influence until about eight o'clock a.m., when the breathing became stertorous, the pupils dilated, and her state so alarming that I withheld the chloroform without having a return of the convulsions; but she lay comatose until the next midnight, when she died. About the middle of the afternoon she seemed dying, but on hypodermic injection of ether and brandy, she recovered, only to sink again.

Now, the question with me is, Did I treat this case judiciously? Would the result have been better if I had had bromide or chloral at first? Was it good treatment to give morphia with contracted pupil, even if it did dilate under the influence of light? Ought I to have delayed venesection as long as I did? In olden times I used to bleed largely and at once, but of late—in fact for many years, have treated cases successfully without bleeding at all. I attended a case last winter in which the attack came on a couple of hours after delivery, and under the use of morphia, bromide, and chloral it did well. It is a long time since I have seen a death from eclampsia, and the death of this young woman deeply affected me.

LOCOMOTOR ATAXIA—RIGHT SCIATIC NERVE STRETCHED FOR RELIEF OF "LIGHTNING PAINS."

BY J. STEWART, M.D., ETC., BRUCEFIELD, ONT.

M. Shea, aged 43, when first seen in September of 1881, complained of shooting pains in his legs, thighs, and lower part of the abdomen. He also complained of inability to walk in the dark, and giddiness. The pains made their first appearance twelve years ago while he was engaged in working

in the lumber woods of Wisconsin. His occupation was that of a driver, and he was compelled to sit for hours on the cold logs, and it is to cold, contracted in this way, that he attributes his present trouble. For several years the pains only recurred at long intervals; but lately he is seldom—rarely more than 24 hours—free from them. They have also greatly increased in severity during the last two years, and especially during the last few months. He first noticed that he was apt to stumble in the dark, five years ago. The ataxia has steadily increased during this period. For several months it has been so pronounced that he has been unable to perform his usual work. With the exception of gonorrhœa, he never had any illness. He is certain that he never had syphilis. Family history is good. He says he never ate or drank to excess.

Condition on the 1st of October, 1881, two weeks prior to the stretching of the right sciatic nerve.

The lightning-like pains with which he is afflicted recur very frequently; the longest interval of freedom from them during the last year has been only five days. They generally affect the lower extremities. It is but seldom he complains of pain elsewhere, and then only in the left arm. The pains are of extreme severity, but only of momentary duration. They generally last 24 hours, and during that time are nearly always confined to a small spot. A favorite situation for them is the dorsum of the right foot. When they last for 24 hours it is always noticed that the limb which has been their seat has atrophied. Repeated measurements have shown a diminution of half an inch in the circumference of the limb. He is very slow to appreciate painful sensations when applied to the two lower and left upper extremities. In the feet there is an interval of about six seconds before he is able to feel a severe pinch or the prod of a needle. In the legs this interval is five, and in the thigh eight seconds. He feels the simple rubbing of the hairs on his legs much more readily than a severe pinch of the skin. He is able to distinguish, although slowly, the difference between a hot and a cold application, when applied to his lower extremities. With his eyes shut he is unable to touch the point of his nose with either hand, nor is he able to point out the position of his feet. His sight is good, although there is commencing atrophy of both discs. The pupils react slowly to

light, but readily when the eyes are accommodating. There is no myosis or paralysis of any ocular muscle. He is able to distinguish colors. His hearing, taste, and smell are all normal. He complains greatly of numbness of both lower extremities, and of a very disagreeable sensation, as if the skin were too tight for his legs. When walking he has to keep his eyes on his feet or he would fall, and he feels as if he were treading on some soft substance. There is a loss of sensation in the thumb, index, and middle fingers of the left hand. He is able to retain his urine without it causing him the least inconvenience for over twenty-four hours. To empty his bladder he has to strain very much. He is troubled with obstinate constipation. He says he often feels as if a weight of one hundred pounds was compressing his waist. When standing or walking he complains of what he calls a cramp-like condition of the muscles of the lower part of the abdomen. The patellar tendon reflex is absent on each side. There is no ankle clonus or plantar reflex. The cremasteric and epigastric reflexes are absent. When walking, his knees often give way suddenly under him. He says that for this reason he avoids as much as possible walking on the streets. He has the characteristic gait of an ataxic. He is unable to walk or stand with his eyes shut. Intelligence and memory are not affected. Lately he has been at times melancholy, at other times he is in the best of spirits.

On October 14th the right sciatic nerve was stretched. The right was chosen on account of the pain being generally more severe in that limb. The night following the operation the pains set in on the outer side of the right knee and were more severe than they ever had been. The following day they left, and did not reappear for three weeks. This was the longest interval of freedom from the pains since they first commenced, twelve years previously. It is now about eight months since the operation was performed, a period sufficiently long to judge what, if any, influence the stretching has exercised on the disease or its symptoms. The results may be summed up as follows:—

(1.) *On the pain.* The result on the whole has been very satisfactory. Previously he suffered nearly one-fourth of the whole time from the pains which were of an agonizing character. Now he seldom has attacks oftener than once every three weeks, and he has been as long as six weeks free.

Before this operation the pains set in suddenly, with great severity, and left just as suddenly. Since its performance they come on by degrees, increase up to a certain pitch, then decline slowly. During the wave of ascent the intervals become shorter and shorter, and during the wave of descent they become longer and longer, until finally they cease altogether.

(2.) *On the patellar reflex.* Previous to the stretching there was absolutely no response, but since, there has been an appreciable jerk when the tendon is struck. It is, however, very late in making its appearance, there is often an interval of two seconds between the tap and the response. According to Eulenburg* the interval should be only $\frac{1}{32}$ of a second. This he found to be the interval in the examination of eighty healthy male adults.

(3.) *On the delayed sensation.* Prior to the operation it took him from five to eight seconds to feel the stab of a needle in either lower extremity. He can readily appreciate now, and has, since the stretching, a similar irritation in from one to two seconds.

(4.) *On the muscular sense.* Up to the time of operating it was with the greatest difficulty, and then only after repeated trials that he could touch his nose, or point to the position of his toes when his eyes were shut. He can readily perform these acts now.

(5.) *On the ataxia, etc.* The operation did not exercise the least beneficial effect over the ataxic symptoms. Neither was there any favorable change made over either the bladder or rectum symptoms. The ataxia has been steadily progressive. The sense of weight around the lower part of the abdomen is as great as ever.

A very interesting symptom occurred six days after the stretching, viz.: a very extensive hæmorrhage from the wound and into the subcutaneous tissue of the limb operated on. The bleeding was copious enough to saturate all the antiseptic dressings, and even find its way through the bed. This was likely the result of the pains which set in a few hours after the operation, and lasted with great severity for nearly 24 hours. This is a more probable explanation than that the result was from any injury sustained by the vessels from the stretching.

*Ueber die Latenzdauer und den pseudoreflexorischen charakter der schnenphenomene. Nernst, Centil. No. 1.

Straus* reports several cases of extensive subcutaneous hæmorrhages following the pains of ataxia. These ecchymoses are probably induced by direct irritation of the vaso-dilator fibres. It has been shown, both by Brown-Séquard, and Stricker, that the posterior roots contain vaso-dilating fibres. If this view be correct, then the ecchymoses and the lightning pains are caused by the same morbid process.

QUARTERLY REPORT ON THE PROGRESS OF MEDICAL SCIENCE.

BY J. STEWART, M.D., L.R.C.P. AND S., EDIN., BRUCEFIELD, ONT.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

The treatment of phthisis by the constant inhalation of antiseptic substances, has received a great impetus since the discovery of the *tubercle bacillus*, by Koch and Baumgarten.

Undoubtedly in the future this mode of treatment of phthisis will not be so neglected as it has been in the past. We ought soon to be in a position to estimate what benefit is likely to be derived from it. That it will be of marked utility, at least in warding off some of the complications (septicæmia) is clear, but to treat a case of phthisis without any other form of medication would be very irrational. Of the many antiseptic substances used up to the present, the following may be mentioned:—Carbolic acid, creasote, spirits of turpentine, thymol, terebene, camphor, eucalyptol, tincture of iodine, etc. Dr. Yeo, of King's College Hospital, uses a combination of carbolic acid or creasote with equal parts of the spirits of chloroform. The latter is said to diffuse these substances, and is itself somewhat of an antiseptic, and has a soothing effect on the often irritable bronchial mucous membrane. If cough is present it has a wonderful influence in allaying it. Twenty drops of a mixture of equal parts of creasote and spirits of chloroform dropped on the tow of the inhaler, and repeated when exhausted, is enough to bring about these results in a short time.

Benzoate of soda has been much used in Germany during the last two years, in the form of

spray, but as it requires the constant attention of the patient it is not so convenient as the above method, and further, it is doubtful whether it possesses antiseptic properties as pronounced, as carbolic acid, creasote, etc.

The following case is well worth quoting as a good example of the influence exercised over pulmonary tuberculosis:—The case was under the care of Dr. Burney Yeo. The patient was a married lady, aged 28, who had lost two brothers from consumption. For the past two years she was losing flesh, and had been troubled with a cough. She was confined last Christmas, and since that she was much worse. Her cough was bad and attended by a profuse expectoration. She was also troubled with night sweats. Voice almost lost; appetite poor; pulse 112; respiration 20; temperature 101. Great emaciation. There was pronounced physical evidence of consolidation of the left apex and a part of the right lung posteriorly corresponding to the spine of the scapula.

She was ordered to wear as constantly as possible a respirator, charged with from five to twenty drops at a time of a mixture of equal parts of creasote and chloroform. She was to take iron, quinine and the hypophosphite of lime internally. After three weeks of the above treatment the improvement was very marked. The temperature had become normal and the night sweats had entirely disappeared; her voice had returned, and the cough and expectoration were greatly lessened. The dulness over the left apex was much less evident; her general condition was greatly altered. Dr. Yeo, in speaking of this case, said: "I have never seen a more striking improvement in so short a time, under any plan of treatment, or in any locality. But this patient had been unusually obedient to the instructions that had been given to her. She had devoted herself at once, and unhesitatingly to all the details of the treatment. She had removed immediately to an aseptic if not antiseptic atmosphere; she had passed a great part of her time in a hammock suspended between fir trees, and she had perseveringly worn her inhaler as I had directed."

For many years Prof. Jaccoud, of Paris, has been in the habit of treating certain cases of phthisis by the internal administration of creasote. "This remedy," he says, "more rapidly and more surely than any other, diminishes the expectora-

* *Archives de Neurologie*, No. 4, 1881.

tion and limits the extent of the catarrhal lesions, and thus reduces considerably the area of the pulmonary changes. But that is not all; I am induced to believe that creasote may act on the fundamental lesions, and promote indurative changes, which, as you know, is the method of cure."

He gives it in doses of three minims to commence with, and increases it by a minim every ten days until five, and not more than six minims. It can be given in the cod-liver oil, or if the patient is not taking this, in glycerine. The following is the formula:—Glycerine, 10 drachms; brandy, 2 drachms; creasote, 3 to 6 minims; a third of this to be taken three times a day.

The internal use of carbolic acid has been recommended also, but it is not likely to come into favor when we are in the possession of as trustworthy but much less dangerous antiseptics. Of all antiseptics benzoate of magnesia can be given in the largest doses internally. As much as an ounce can be given in the twenty-four hours without causing any inconvenience.

Fränkel, on the strength of results obtained by the direct injection of antiseptics into the lung tissues of rabbits, recommends a similar procedure in phthisis, putrid bronchitis, and gangrene of the lungs. He has only put this idea into practice once in the human subject. In a patient with foetid expectoration he made six injections, each one containing fifty minims of a five per cent. solution of carbolic acid. There was no fever or reaction following the injection. No beneficial action on the expectoration followed. He considers that these injections set up inflammatory action in the lungs, and that as a result of this there is left cicatricial bands which limit the tuberculous process when the part injected is healthy and in the neighbourhood of the diseased portion. When the injections are made directly into a diseased part of the lung the agent acts, he considers, by changing the character of the inflammation.

THE TREATMENT OF EPILEPSY BY LIGATURE OF THE VERTEBRAL ARTERIES.

Dr. Alexander, of Liverpool, in the current number of *Brain*, gives an account of the treatment of twenty-one inveterate cases of epilepsy, by ligature of the vertebrals. Three of the cases have been free from fits for a year. In nine others

the freedom from fits has been so long that a cure may be said to have resulted, and eight have "improved in so many respects, or are improving so steadily, that the operation would be justifiable were no better results ever obtained."

Dr. Alexander considers that the treatment will become general for that class of cases of epilepsy that are uninfluenced by drugs or removal of all possible peripheral causes.

He finds the artery by making an incision of three inches in length along the external border of the sterno-mastoid, commencing about an inch above the clavicle, and at the lower end and outer side of the external jugular vein. The layers of fascia are cut through until the fatty tissue over the anterior scalenus is reached. The sulcus between this muscle and the longus colli being reached, the sixth cervical vertebra is easily made out. The artery will then be easily found, provided no veins are met with. There is little or no hæmorrhage if the operation is performed carefully.

To afford a reasonable hope of success, the operation should not be put off too long, but should be performed when it is evident that no hope of cure arises from the judicious use of medicinal agents. Even in cases of chronic epilepsy, Dr. Alexander has found the operation beneficial, and he is inclined to think that many of even the most inveterate of these cases can be cured.

He considers that the operation acts by diminishing in a marked degree the hyper-sensitiveness of the medulla, and before the collateral circulation is re-established the sensibility of the epileptic centres are so benumbed that they do not respond as formerly. The dangers of the operation are insignificant. There was only one death in over thirty operations. The cause of death in this case being septic pleurisy, due to the tearing off of the antiseptic bandages by the patient, who was an idiotic girl.

THE INFLUENCE OF ACUTE NEPHRITIS UPON THE HEART AND BLOODVESSELS.

Dr. Riegel, of Giessen, in an excellent paper, brings forward a large amount of evidence which shows that in many cases of acute nephritis, changes take place in the heart and bloodvessels even during the first few days. The first evidence of this change is seen in the state of the pulse.

From an artery beating quickly and with low tension, we have as the result of vessel changes, one beating slowly and with high tension. It is not long before we have hypertrophy of the heart when once there is marked and constant high tension in the smaller arteries. Whether this change is to be a permanent one or not depends altogether on the duration and severity of the nephritis. The more severe and extensive the nephritic changes the earlier appears the vessel and heart changes. Until quite recently the danger of circulatory disturbances following the acute forms of Bright's disease, was not even thought of. The attention of the profession was exclusively directed to the relation between chronic Bright's, and changes in the circulatory system. The late, much lamented, Friedländer was about the first to demonstrate that in acute nephritis we have changes in the heart corresponding to those which attend the chronic forms of nephritis. In the anatomical examination of a large number of cases of scarlatinal nephritis in children, which had lasted a longer time than usual, an almost never-failing condition of hypertrophy of the heart was found, often combined with dilatation, in some cases uniformly developed on both sides, in others more strongly on the left. The increase of the heart's volume was in nearly all cases very considerable, the ventricle and auricle being widely dilated; the muscular substance with the exception of the increase of volume, was mostly unchanged; only in a few cases was there found a partial degeneration of the muscular fibres. Clinical observations have not corroborated marked changes in the circulatory apparatus as the result of acute nephritis, at least nothing has been mentioned respecting such conditions. In Traube's work, edited by Fränkel, there is only the general statement, that an abnormal tension of the aortic system can be observed in the fourth week of a nephritis. This will appear most important perhaps, when we consider that Traube, in another place, says that in the more severe cases of diffused nephritis, in previously healthy young patients, in the first week of the disease, a number of palpatory and auscultatory signs can be recognized, which establish beyond doubt, the existence of a considerable sympathy between these two systems.

Henoch was not able to satisfy himself that circulatory changes followed scarlatinal nephritis.

Riegel, speaking of the way to recognize these changes, says, that the abnormal tension of the pulse is so clear and characteristic a symptom, that one with a little practice in the estimation of the tension of the vessels, without being aided by the results of examination of the urine, will have his attention drawn to the existence of a kidney disease. "I, myself, am repeatedly, on the first examination of a patient, first directed to the existence of a nephritis by this remarkable increase of tension. Also in diseases attended with fever, the sudden occurrence of high tension of the pulse, although by no means the most important symptom, will arouse a well-grounded suspicion of the complication of acute nephritis. I remember several such cases, more especially one of recurrent fever, in which the suspicion was first aroused by this high tension, together with continued high temperature, that the case was not one of febrile albuminuria, but a complicated acute nephritis. Further investigation and observation confirmed this suspicion. Fever, indeed, as is well known, always lowers the blood pressure in the aortic system. If, under such circumstances, there enters suddenly in the course of a febrile disease, an abnormally high tension, in the place of a hitherto lowered tension, we have an indication of a special complication. In the trifling number of as yet well-recognized causes of high tension in the aortic system, there is usually no difficulty in determining to which cause in particular this change is owing. Without doubt, acute nephritis is one of the most important and most frequent of these causes."

Riegel reports the case of a previously healthy boy, aged 15, who was admitted under his care on the 25th of January of the present year, with scarlet fever. The eruption had already begun to abate, and in some parts slight desquamation was to be seen. The urine was albuminous; there was no other complication. The patient improved rapidly. On the 6th of February vomiting occurred. Before this there was every indication of complete recovery. There was also noticed a slight angina tonsillaris. On the 7th of February the urine was as albuminous as ever. The angina speedily disappeared, whilst vomiting occurred repeatedly during the next few following days. On the 10th there was noticed a hitherto unrecognized hardness and tension of the pulse, with slowing of the same. The sphygmograph showed a very

marked increased tension, the secondary being even higher than the primary one. Urine could not be obtained for examination, the patient stating on being questioned, that he had passed none from the previous evening.

On the 12th there was observable, along with the continuance of the abnormal tension, an increase in the area of the heart's dulness, and in the strength of the apex beat. These signs increased during the remainder of the course of the disease. On the 18th there were convulsions; the pulse became quick. Patient died on the 19th in a general convulsion. On *post mortem* there was found a hæmorrhagic and glomerulo-nephritis with well-marked dilatation and hypertrophy of the left ventricle. There was already commencing fatty degeneration of the fibres of the ventricle. There was also complete suppression of urine for ten days. In this case all the above extensive heart changes had occurred within a period of ten days as the result of the acute nephritis. Riegel gives an account of six additional cases where the circulatory disturbance was pronounced, although not so great as in the above case. They were all instances of vessel and heart changes, as the result of an acute nephritis.

Correspondence.

UNITY OF ACTION AMONG PHYSICIANS.

To the Editor of THE CANADA LANCET.

SIR,—You are probably aware that at the last meeting of the Ontario Medical Association a resolution was drafted and generally approved of, asking for a committee to report at the next meeting of the Association some plan by which the individual influence of medical men could be united and exercised for the benefit of the profession and the country. Several reasons prevented the resolution coming up.

We hear a good deal about the influence our profession might exercise if united—an influence, doubtless, which would be absolutely irresistible; and probably there never was a time when there were greater reasons for united action amongst us than the present. Almost every physician will admit that we ought not to have any thing to do with politics commonly so-called, and that the words Reformer and Conservative should not enter,

practically, into our vocabulary. We should, I am sure all will acknowledge, support the right sort of men, without reference to party. The sexanary of legal gentlemen now forming the government of Ontario may be all well enough in their way, politically speaking, but when they come to deal with matters affecting the interests of the profession or the health of the public, what a spectacle they present! That hideous monstrosity known as the "Coroners' Act," and the recent Act relating to public health, may be cited as examples. With reference to the latter, many of the leading physicians in the Province, after a number of meetings, in view of the large amount of preventable sickness, decided to ask the Government for \$5,000 with which to pay the expenses of a Board of Health for the Province, deeming this a small sum for the purpose—as small as an efficient board could be worked with. Though the Government readily acknowledged the value and usefulness of preventive medicine, and, be it observed, though they give hundreds of thousands of dollars to less worthy objects, after two or three years of shilly-shallying, they throw down the bone of \$2,000, with which the medical profession is to "run" a Board of Health for Ontario. A loaf is asked; not half a loaf is given. Many supposed, as did the writer, until the last meeting of the Association, that \$5,000, as asked, had been appropriated.

I am loath to take up too much of your valuable space; but this is a very important question to which attention is being drawn. I have a proposition to make, in which, however, I shall be as brief as possible. It is now more than a quarter of a century since a medical man occupied the position of a member of the Government of this Province—the Hon. Dr. Rolph. No class of persons know better the wants and needs of the country than do the doctors, chiefly from their constant intercourse with the masses of the people; and in the interests of the country and of the profession, which are identical, I propose that means be taken by which some competent physician shall be made a member of the next Government. I am not prepared to say at present how this may be best promoted, but, as before stated, it is a very important matter, concerning as it does directly the Governmental affairs of this Province, and is unquestionably worth the while of the profession to give some time and attention to it.

I should like to suggest also, in this connection, that we advocate changes, and important ones too, looking towards the simplification of the public educational system, which will soon, if not simplified and improved, do irreparable mischief, and send pupils, teachers and parents to the insane asylums. Finally, in view of the agricultural and manufacturing interests of Ontario, would it not be well if there were a practical farmer and a practical manufacturer as members of the Government, and not more than three lawyers at most. There are many who would be glad to learn the opinion of members of the profession on these questions.

Yours, etc.,

M.D.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

The last regular quarterly meeting of the Huron Medical Association was held in Clinton, on Tuesday, July 18th, Dr. Holmes, of Brussels, President, in the chair. The following members were present:—Drs. Holmes, Worthington, McLean, Taylor, Hyndman, Young, Sloan, Graham, Williams, Bethune, and Stewart.

Dr. Young, of Londesboro', showed a very well marked case of annular malignant stricture of the rectum, in a man, aged 51 years. The first symptoms of stricture showed themselves about a year ago.

Dr. Taylor presented a man, aged 55, who has mitral stenosis and commencing degeneration of the heart. The organic heart changes in this case, appear to have followed a pneumonia which affected the patient about nine months ago, at least there was no physical evidence of any valvular or mural changes during the progress of his pneumonia.

Dr. Stewart exhibited a man, aged 35, who has well marked atrophy of the left scapular muscles. The case is one of *progressive muscular atrophy* commencing in the shoulder muscles. The supra, and infra-spinati are almost completely gone. The disease is of two year's standing. Lately he has had considerable pain about the right shoulder, but up to the present there is no wasting of the muscles in its neighbourhood. The atrophied muscles, and in fact nearly all the voluntary muscles of both upper and lower extremities are the seat of fibrillary twitchings when percussed. The

treatment pursued in this case is the use of the faradic current direct to the atrophied muscles. It has not as yet been used sufficiently long to say whether it is going to do any good or not.

Dr. Graham, of Brussels, related the particulars of a remarkable case which he recently saw. The patient is a girl, aged 12. During her waking hours she only breathes six or seven times in the minute. With each inspiration the epigastrium sinks in, and the shoulders are drawn forwards and upwards very forcibly. She has been breathing in this manner for six months. Some time previously she is said to have had inflammation of the lungs. She is otherwise perfectly healthy. She is said to breathe naturally during sleep.

TORONTO MEDICAL SOCIETY.

Ordinary meeting, June 15th, 1882, Dr. A. H. Wright, Vice-President, in the chair.

Dr. Bray, President of the Medical Council, and Drs. Rosebrugh, McCargow and Day, members of the Council being present, were cordially welcomed by the Vice-President.

Dr. Zimmerman showed a young girl affected with psoriasis guttata and nummularis. The disease began eight weeks ago.

Dr. Oldright reported the following case:—A lad, aged 18, overgrown, had pains of a rheumatic nature for some days, when pneumonia developed, followed in a few days by pleurisy. Shortly afterwards a peculiar hissing endocardial murmur became evident. Feet became cedematous, pulse irregular, and temperature varied from 100°—103°. Urine gave reaction indicating coloring matter of bile. As these symptoms improved he became dull, morose, not answering when spoken to; refused food and had to be fed with a stomach pump.

Dr. Cameron reported a case of popliteal aneurism in a man aged 50 under his care at the Toronto General Hospital. The tumor was first noticed last December, increasing steadily since; impulse and bruit distinct. During the last week, treatment by flexion and instrumental compression alternately as they could be borne has been tried, but with only indifferent results. It was then proposed to apply an Esmarch bandage up to the hip omitting the tumor, but a systolic cardiac murmur contra-indicated anaesthesia. Besides, a second aneurism was discovered in the lower part of the epigastric

region which would probably be injured by the increased pressure resulting from the application of the bandage as proposed. Only two alternatives were left, digital compression and ligation of the femoral.

Dr. Oldright deprecated such serious means as ligation until digital compression had been tried, and related a case of aneurism of the lower part of the femoral, under his care, cured by this treatment after compression for 18 hours by relays of students.

Dr. Zimmerman suggested passing a small trocar through the sac, and introducing a horse hair to be left in situ.

Dr. McCargow said the galvanic needle might be tried.

Dr. Cameron then showed a cysto-sarcoma of the testicle removed from a man aged 60. The testicle was adherent to the sac at many points, and had to be dissected off. The glands in both groins were enlarged, and the disease extended up the cord, so that it was thought advisable to ligate it *en masse* in order to remove as much as possible of it.

Dr. Rosebrugh, of Hamilton, gave a short account of several cases of ovariectomy occurring in his practice.

The Society then adjourned.

Ordinary meeting, June 29th, 1882, Dr. George Wright, President, in the chair.

Dr. Cameron showed a tumor taken from the side of the neck of a woman aged 70. Three years ago it was as large as a hen's egg, hard and freely moveable. Was supposed to be enchondromatous. It became cystic, and as the cysts ruptured from time to time, considerable hemorrhage occurred. Also uterus and ovaries from a young girl who died from puerperal fever in the Lying-in-Hospital four days after delivery. Labor was natural and temperature normal. A few hours afterwards she had a severe chill and temperature rose to 105°. P.M. showed distinct evidence of peritoneal inflammation with considerable sero-purulent fluid. Ovaries much inflamed, left more so than right.

Dr. Oldright reported in reference to the boy whose case he had brought to the notice of the Society at last meeting. He began to take food a few days afterwards, spoke a little, but gradually sank and died. No post mortem.

Dr. King reported a case of pernicious anæmia in a woman who died after four months illness. Pulse usually over 100, highest temperature 102½°. Thought the red corpuscles were decreased, but had made no accurate examination of the blood.

Dr. Cameron drew attention to the statement of Dr. Fenwick of London, that in many of these cases there was degeneration of the glands of the pyloric end of the stomach, and disease, usually cancerous or tubercular, of the supra-renal capsules. A general conversation on the treatment of anæmia followed, and on the relative merits of the various preparations of iron in these cases.

Dr. Riddel reported two cases of death from coma; in one, there was pus in the lateral ventricle and in the other a clot in the right parietal region.

Ordinary meeting, July 13th, 1882, Dr. Geo. Wright, President in the chair.

Dr. Macdonald in the absence of Dr. Temple showed a uterus in which rupture had occurred during labour. The woman, a primipara, was unmarried, aged 26, healthy. Labor began at 2 p.m. Saturday, July 8th, membranes ruptured shortly afterwards, during, or before removal to the Lying-in-Hospital. Pains moderate. At or during a pain of greater severity than the preceding ones, though not excessive, she felt something give way. The pain ceased, moderate hemorrhage followed, tenderness over uterine tumor. Collapse gradually set in and was marked at 10½ p.m., when first Dr. Temple arrived. Hemorrhage now profuse. On examination a rent was discovered in the anterior wall of the uterus, through which the hand passed easily into the abdominal cavity. Ether and ergot were administered subcutaneously and long forceps applied, but they slipped. Ether was then given, and delivery affected by turning. Child dead. Uterus responded but slightly to all stimuli used. The woman rallied somewhat, but died the following Monday morning, 39 hours after the rupture. A large quantity of fluid extract of ergot, and five drachms of ether and brandy were given subcutaneously. Post-mortem showed a ragged rent in the uterus 7 inches long, extending from the juncture of the neck and body on the left side downwards and to the right, to the os uteri.

Dr. Oldright showed a fatty tumor from the head of a woman, aged 65. Also a small fibroid poly-

pus removed from the uterus on account of persistent hemorrhage.

Dr. McPhedran reported a case of Railway accident to a child aged 9, at Oshawa, in 1876. He saw the case with Dr. Rae. The child was comatose the scalp cut in several places; blood flowed from the mouth, nose and ears, and there was considerable sub-conjunctival extravasation. Two pieces of brain matter, each as large as a bean, escaped from the left ear. The left humerus and clavicle were broken. Complete recovery ultimately took place.

Dr. Macdonald next read a long and interesting paper on "Menorrhagia and Metrorrhagia" with their causes and treatment, which was fully discussed.

Selected Articles.

MITRAL STENOSIS IN A GOUTY HEART.

BY J. MILNER FOTHERGILL, M.D., LONDON.

Our knowledge of valvular affections of the heart does not rest on the detection of a murmur, its seat, the point of its maximum intensity, and its precise time in the cardiac cycle. Nor does their treatment consist in the administration of iron and digitalis promiscuously. Such simplicity may be admirably adapted to the requirements of an examination table, but it is perilously inadequate to the wants of actual practice. For the latter some familiarity with the natural history of each form of valvular disease is eminently desirable, which alone will enable the medical practitioner to read his case aright. There is first the individual to be estimated; then the disease to be measured. Then 2 and 2, or the nearest approach to that numeral in each case, have to be put together; and then 4 is the resultant product. But the equation has points of practical difficulty not represented in the mathematical formula. It is not always easy to determine the precise "2" of each factor. For instance, let me adduce the following case:—

E. A. W.—, aged fifty-four, the mother of a family in a south-western county, came to me a little while ago, because her local medical man had found something amiss with her heart. She had been a very active person, but recently had not felt so equal to effort. Yet she had no shortness of breath on exertion, and only a little palpitation on effort at times. She had some dilatation with hypertrophy of the left ventricle, and beyond that a long mitral stenosis-murmur heard to the right of the left apex; but over a limited area only. There were no indications of regurgitation. Now, what

was the significance of this murmur? Was it—(1) The evidence of contracting or sclerotic endocarditis of Rosenstein? was it (2) the result of an old-standing injury, the outcome of a bypast acute endocarditis? or was it (3) a mere peculiarity, a sound produced at the mitral ostium, which has been, and was, and is, and will be without any significance whatever. I am not ashamed to confess that the problem is insoluble to me. The symptoms were quite accounted for by her general condition, for she was bilious and somewhat malnourished. Any failure of power in her could be perfectly accounted for without the hypothesis of contraction of the mitral ostium. There was no thrill accompanying the murmur; but such is usual in the contracting endocarditis of middle age and advanced life. There was no irregularity in the heart's rhythm. Nor would the presence of irregularity or a thrill have cast the least ray or glimmer of light upon the case, in my opinion. There was the unmistakable murmur—seat, maximum of intensity, period in time; and a long murmur to boot. The minutiae of mitral stenosis is not recorded in my note book. There was no possibility of mistake as to the presence of that murmur which is held to be pathognomonic of stenosis of the mitral ostium. There was the murmur, true; but what was the anatomical condition underlying it? That was the essential question to be asked; and, if possible, answered. The murmur of itself was nothing; but its cause was fraught with the most intense interest. With which of the three conditions spoken of above was it casually connected? I summed up the evidence against its being the outcome of a steady progressive diminution of the mitral ostium due to sclerosing endocarditis, and gave a prognosis accordingly. Whether the diagnosis, and with it the prognosis was correct or not time alone can tell. The case was certainly one where contracting endocarditis might be present; for its associations were there as regards the general conditions; but the essential features of mitral disease were not sufficiently prominent to establish its presence.

From the negative aspect of a case like this, it may be well to go on to describe the positive features of mitral stenosis. Assuming that some of my readers are not thoroughly acquainted with the natural history and features of mitral stenosis in all its varieties, it may be well to point out that such mitral stenosis has very different features from the mitral stenosis of young subjects. Perhaps in the dead-house the features are more alike than they are clinically. In the mitral stenosis of the young, set up by acute endocarditis, there is the weak pulse of a small left ventricle; shortness of breath on exertion; enlarged right ventricle; tendency to dropsy in the serous cavities, or the lower limbs. Often there is the "heart cough," of excess of blood in the pulmonic circulation. There is a murmur, presystolic in time, conveyed to the right

of the left apex, often accompanied by a thrill. Such are the leading features. The case may get worse steadily, and even with considerable rapidity; or, as is more commonly the case, the patient is fairly well when quiet, but effort produces distinct shortness of breath, with palpitation. Anything which impairs the strength may elicit some cedema. But though the organism is crippled by the injury done to the mitral valve, the injury itself remains static, and manifests no tendency to go on from bad to worse; or if it does, it is immeasurably slowly. In such a case the administration of digitalis and iron would be likely to be of distinct service.

Now, as to the mitral stenosis of the gouty heart. Here there is a permanent high-blood pressure in the arteries, leading to hypertrophy of the left ventricle, with subsequent hardening of the arteries; the cardio-vascular changes which constitute the first stage of the granular kidney, so ably described by Dr. Mahomed in his recent thesis "Chronic Bright's Disease without Albuminuria." The hypertrophied ventricle contracts with vigor, so overcoming the resistance offered by full arteries to the cardiac systole, and forcing the blood into the aorta, which on its recoil closes the aortic valves with a loud sound indicative of forcible closure; and this forcible closure frequently sets up valvulitis, with subsequent mutilation of the aortic valves. This association of aortic disease with a gouty heart is now well recognised. But the powerful contraction of the hypertrophied left ventricle causes also forcible closure of the mitral valves; they have to sustain a strain equal to the force required to overcome the resistance of a full aorta, and this strain tells upon them in time, leading to sclerosing endocarditis. Such valvulitis may give either stenosis or insufficiency of the mitral valve. When the free edges become puckered or contracted, then insufficiency with regurgitation follows; when the valve curtains are soldered together by a slow inflammatory growth extending from the attachments of the valve, then stenosis with obstruction is the result. Now, whatever the form assumed by the valvulitis, the features of the gouty heart will remain to the end; even when all the phenomena of advanced mitral disease are developed and implanted thereon. The aspect is never that of a simple primary mitral stenosis; nor does the interest centre round the murmur evoked by the morbid process, but attaches itself rather to the associated general condition of the vascular system.

A certain amount of injury to, and deformity of, the valves has gone on before it is sufficient to produce a murmur. But there may be the rational symptoms of a mitral lesion before the ominous murmur is set up. It may be possible to "suspect" a mitral valvulitis before the tell-tale murmur can be heard; there is indeed a pre-murmuric

stage in all probability. It is no part of the design of the writer here to discuss the early stage, but to confine himself to the consideration of stenosis—i. e., of a stage so advanced that it carries with it a murmur indicative of the character of the injury done. What are the features of this form of mitral stenosis?

The patient is elderly; has a more or less pronounced senile aspect. The complaint is that the power to undergo exertion is impaired. There is shortness of breath upon effort. There may be nothing more. The pulse may be feeble and rapid, but there is nothing else about it, nothing characteristic. But on auscultating the heart over a very limited area, at or near the right apex, a tiny "whiff" can be caught. Only over a small spot; move the stethoscope ever so little and it is apt to be lost; certainly lost if the stethoscope be distinctly moved. Here the presence of a murmur is significant, and unmistakeable enough; at least in the majority of cases. But there is also a strong heart very commonly, and a fairly full artery—i. e., there are the associations of a gouty heart along with the mitral stenosis. Usually the nature of the cause of the murmur is clear and patent, and not a matter for reasonable doubt, as in the case given above. Here is a distinct explanation of the failure of power complained. Or there may be a more advanced condition attained before the case came under notice, and the patient is confined to bed with or without some positive patch of pulmonary congestion. But there are the significant murmur, the rational features of mitral disease, linked with the cardio-vascular changes of the gouty heart, or granular kidney, as the case may be. The diagnosis bears on the prognosis and the treatment, especially as to the administration of digitalis. Here there is not an old-standing limited injury to valves, as static and non-progressive as the scar of a burn; limiting the patient's powers, but possessing no tendency to further advance. There is a contracting or sclerosing valvulitis afoot, which tends to go on from bad to worse, because the mitral valve has to bear the strain put upon it by a hypertrophied left ventricle. It is a progressive form of valvulitis. Certainly; but granting that, at what rate is it progressing. "*Quien Sabe?*" as the Spanish girl said when they asked her who was the father of her child" (Kingsley). One would like to know, but how can one can get to know? Only, in the language of Oliver Wendell Holmes, by "getting an arc big enough to determine the size of a circle"—i. e., getting a period of observation long enough to calculate the rate of progress. This may entail personal observation, or may be fairly made out by the history of the case. In one case there can be a definite date made out, since which there has been such a falling off in the patient as reveals pretty plainly the time when the lesion began to tell upon the organ-

ism. In another case there will be no data pointing to any special time when the health was obviously impaired. The patient is not very well, feels weak and unequal to exertion, and is scant of breath, and on examination of the chest the murmur of mitral stenosis is audible. Such a case presented itself to me in June, 1880.

A gentleman, aged sixty-seven, who had led an active life, but who latterly had pains which he called "rheumatic," though, he wrote, "his water is more or less high-coloured, and the red sediment is always round the bottom of the pot," which looked like gout—came to me for some "fluttering or palpitation" at the heart. The diagnosis then made was "gouty heart, with mitral stenotic murmur." He was put upon a pill containing some strychnia and digitalis. On this treatment he lost his uncomfortable sensations, and felt very nicely. He went abroad for some time, being conscious of his heart only by some shortness of breath on attempting to climb a hill. A year later he was nicely; his tongue clean, and urine clear; not perceptibly worse. This June he presented himself after an attack of bronchitis, which had pulled him down considerably. The heart was acting irregularly, and the beats were unequal in force. This was due to muscular debility in the heart, the right heart having been severely taxed by the extra demand upon it made by the bronchitis. He had been given carbonate of ammonia, nux vomica, and digitalis by his medical man, according to the formula at p. 367 of the "Practitioner's Handbook of Treatment" (2nd edition), which had suited him well. Indeed, he feels so well that he will not give the heart the rest required for it to recover itself. On his old pill he is doing well, and the muscular tone of the heart is being regained. Even with the recent demand upon the heart there is no evidence that the mitral lesion is perceptibly advancing. In some other cases the inactivity of the valvulitis seems about the same; but in others, again, the progress has been steadily, if not rapidly, downwards. In one case there are violent paroxysms of angina pectoris present.

As to the treatment of these cases, the prevention of the production of uric acid by an approximate dietary and the use of hepatic stimulants, its solution by antilithic alkalies, are measures about whose adoption there can be no question. To keep the blood-pressure in the arteries as low as possible means lessening the strain on the diseased mitral valves on each ventricular systole; and this is attained by reducing the amount of albuminoid waste in the blood, or dissolving it and so letting it escape by the water emunctories. So far so good. But how about the administration of digitalis? To increase the vigour of the ventricular contractions means increase of the strain on the valves. Cer-

tainly; and therefore grave and valid doubts may honestly be entertained about the wisdom of giving digitalis and iron, in a routine manner, in all such cases of mitral valvulitis. When the heart is fairly vigorous, and there are none of the rational symptoms of mitral mischief present, then, probably, it is well to withhold the digitalis and to be content with an appropriate dietary and regimen. But when there are evidences of cardiac failure, then, in all probability, it is well to give the digitalis; albeit in doing so the ventricle does strike harder, and so tax more the mitral valves. Here the ventricle is striking feebly, and the advantage of improving the heart's vigour is not more than counterbalanced by further strain put on the sclerosing valves. In practice each case must be decided by its own indications; and the indications will vary at times in the same case. Nor is it possible to lay down any rules of thumb for the administration of digitalis. The practitioner must weigh carefully the indications for its adoption or the withholding of it in each case. It is not necessary or desirable to give it merely because there is a mitral murmur present; as Rosenstein puts it, "Digitalis helps the heart to pump the blood out of the veins into the arteries," and the fulness of the veins and the comparatively empty state of arteries are the indications for its exhibition; no matter what the murmur, or whether there be a murmur or not. Probably when the rational symptoms of mitral mischief are present it will always relieve them. Whether at times such relief is antagonistic, or prejudicial to the ultimate interests of the case, and therefore it is better to withhold digitalis, is a matter for the exercise of private judgment on the medical adviser. This is certain, the indications for digitalis in such mitral stenosis (or insufficiency, too, for that matter) are not so unmistakable as is the case in mitral valvulitis in the young, where a distinct injury, be the same more or less, has been wrought; but where there is no tendency in the valves to further mutilation, the distorting process being over and done with, the said injury crippling the organism and leading to death from the disturbance so wrought in the circulation, here digitalis can scarcely do any harm; but the same cannot be said of the sclerosing valvulitis of the gouty heart.—*Lancet*.

ORGANIC MURMURS OF THE HEART.

CLINIC, BY AUSTIN FLINT, M.D., NEW YORK.

I proceed now to the subject proper of my remarks to-day, and I will say in the outset that I assume that many of you have already given considerable attention to the study of endo-cardial murmurs; but although this is the case, I think it will be of service to you to go over the ground again, since it is important that you should have this knowledge

1 Since writing the above he has had some distinct gouty symptoms.

so readily at command that you can bring it to bear in a practical way at any moment. No apology is necessary, therefore, for introducing this subject.

The most important endocardial murmurs which we meet with are in connection with the left side of the heart, those of the right side being so comparatively rare that they are of much less practical significance. The murmurs which we will study to-day are four in number, two in connection with the mitral valve, and two in connection with the aortic. The first murmur to which I direct your attention is the mitral direct or obstructive. It is also called the mitral systolic from the time at which it is heard. The second murmur is called the mitral regurgitant, and signifies, as the name denotes, insufficiency of the mitral valve and consequent regurgitation from the left ventricle into the left auricle. The first murmur in connection with the aortic valve is the aortic direct. It may imply an obstruction, or if not this a certain amount of roughness of the surface over which the blood passes. The second murmur is the aortic regurgitant, which involves of necessity insufficiency of the aortic valves with resulting regurgitation from the aorta into the left ventricle. It is a matter of importance, I hardly need say, that all should acquire the ability to recognize each of these murmurs when occurring alone, and also when in combination. All four of them may be met with in the same individual, and we should be able in such a case to differentiate the several murmurs. This knowledge involves, in addition, a recognition of what these different murmurs denote.

In the first place, then, how are we to distinguish the several murmurs, singly or in combination? By way of preface I may remark that every adventitious sound about the heart is called a murmur, the word murmur being always used in this connection in a conventional and technical sense. The regular heart sounds themselves, although certain modifications are noted in them also, are entirely distinct from these. These murmurs, as sounds, present differences among themselves. Thus they may be either loud or faint, soft or rough. They are said to be soft when they sound like a current of air passing from a bellows. When they have not this bellows-like character they are called *rough*, and if the roughness is quite marked they are sometimes designated as *rasping*. Again they are sometimes characterized by a distinct musical note. There are, then, three kinds of murmur, as regards the matter of sound, soft, rough, and musical. The sound of the murmur, however, gives us no information as to its origin. Any of the four murmurs pointed out may partake of either of these characteristics. Let us proceed, then, to inquire by what points we may recognize the several murmurs, and differentiate them when they are found in combination.

This inquiry can be best answered, I think, by a reference to the case of the woman whom I now bring before you. In commencing an examination of the patient, I will call your attention first to the marked pulsation noticeable in the arteries of the neck. This sign, I may say, in passing, indicates, as a rule, aortic regurgitation, but we need not, of course, base our diagnosis on this alone. In auscultation of the heart the stethoscope is better than the unaided ear, as it serves to localize the sounds more satisfactorily. Now placing the stethoscope at the second intercostal space on the right side of the chest, but quite near the sternum, I get a distinct rough murmur. My first inquiry in connection with it is, With which of the two heart sounds does it occur? I find that it is connected with the first sound, and it is therefore a systolic murmur. Suppose, now, that I had some difficulty in determining the heart sounds, which might occur, for instance, with great rapidity and irregularity of action. In that case I might place my finger over the carotid artery while listening to the heart, which would give me the desired information, since the carotid pulsation corresponds with the first sound of the heart. Or I might place my hand over the apex of the heart, and if I could then connect the murmur with the heart impulse, which is synchronous with the first sound, I would know that it was systolic. On further auscultation I find that this murmur cannot be heard much below the base of the heart, but when I carry the stethoscope up to the neck I get a murmur which corresponds exactly to that heard at the second intercostal space. We have, then, a rough murmur at the base of the heart, which is systolic, and which is propagated to the carotid artery. The diagnosis, therefore, is a direct aortic murmur, due either to obstruction or to roughening about the aortic orifice. It is possible, however, that this may be an inorganic murmur, due to some abnormal condition of the blood, but as we shall not have time on the present occasion to enter into a discussion, we will assume that it is organic in character.

While listening to the heart in this same situation I recognize a second murmur, which I can very readily distinguish from the other because it follows the latter, and that not continuously. There is a little break between the two, and I find no difficulty in determining that this last murmur is coincident with the second sound of the heart. If, as is sometimes the case, the second sound could not be made out, the interval would be sufficient to indicate that it occurred at the time when the second sound was to be expected. I find, furthermore, that the murmur is propagated almost down to the apex, which shows that it is due to an insufficiency of the aortic valve. If the valve is sufficient or adequate, as we say, there can, of course, be no regurgitation, but if there is regurgi-

tation the blood in thus flowing back always give rise to a murmur, unless, indeed, the action of the heart is exceedingly feeble. The question now arises, Does the intensity and quality of the murmur give any intimation as to the amount of regurgitation? Experience shows that the answer is a negative one, and this is a practical point of considerable importance, since we should naturally infer that if the murmur was loud there would be a large amount of regurgitation. The reverse of this is perhaps more apt to be true, but there is really no definite rule about the matter. We have, then, two distinct murmurs which succeed each other, to and fro, like the ordinary sounds of the heart. There is one point to guard against when two murmurs exist in this way, and that is the danger of mistaking them for a pericardial friction murmur.

I next go down to the apex, wherever that may be. The rule is, that the point where the lowest appreciable impulse is found is the location of the apex; although it is often the case that we get a stronger impulse at other points than this when the heart is enlarged and the shape of the organ altered. One reason for this is that as the heart enlarges it pushes away the lung, and so comes nearer to the chest wall. You must bear in mind, however, that the lowest point of impulse is always the apex, whether it is in the normal position for the apex or not. As you are aware, we listen at the apex for mitral murmurs, and now placing the stethoscope at the apex in this case, I find a murmur which occurs just before the first sound of the heart. There is no difficulty in determining its relation to the first sound, since the latter is always synchronous with the impulse. This murmur is short, rough in character, and can be heard only over a very circumscribed space. It is worth while to note also that it ends abruptly with the first sound of the heart. From these points I know that I have here a mitral direct, obstructive, or presystolic murmur. This is a murmur which precedes the first sound of the heart, and is usually rough; the roughness being of a peculiar quality, which is described as vibratory. This vibratory character is due to the causes of the murmur, which we have not time to investigate minutely at present. I can only allude in passing to the fact that there are usually adhesions, which produce certain changes about the orifice.

Moreover, while listening to the apex I get still another murmur. This one begins with the first sound of the heart, and is of a soft and blowing character, so that it is readily differentiated from the other. An additional characteristic of it, in contradistinction to the latter, is that it is propagated laterally around the chest as far as the scapula. From these points we diagnosticate a mitral regurgitant murmur, so that we find all four of the murmurs which I have mentioned, present in this

patient. Here, as before, the loudness and quality of the regurgitant murmur affords no indication of the amount of the valvular insufficiency.

There is one point to which I will now call your special attention. Please to mark that two of the four murmurs occur synchronously, the aortic direct and the mitral regurgitant, which are heard with the first sound of the heart; while one, the aortic regurgitant, is diastolic, and one, the mitral direct, is presystolic. Given a systolic murmur, and if it is an aortic obstructive, it will be heard with the greatest intensity at the base of the heart and propagated to a very slight extent below this point. On the other hand, if the systolic murmur be a mitral regurgitant, the greatest intensity is found at the apex, and propagated laterally to the back of the chest. In case both these murmurs exist, as in the present instance, we shall find the characteristics of each. One is rough and the other soft, while each has its special location and direction of propagation. To determine the distinct presence of both we may carry the stethoscope gradually from apex to base, or *vice versa*, when we shall arrive at a point where one murmur ceases to be heard; while if we proceed further the other will presently commence to appear. On this occasion I will not go into the question whether there is enlargement of the heart in this patient, or, if so, whether its character is of the nature of hypertrophy or dilatation, or of both, as is more apt to be the case.

There are some points of interest in connection with the history of the case to which I will now direct your attention. The patient is a native of Ireland, twenty-eight years of age, and she is an embroiderer by occupation. She was admitted to the hospital two days since. Ten years ago she had a very severe attack of acute articular rheumatism (the first in her life, as far as we are able to ascertain), and since then the attack has been repeated regularly every spring, although with diminished intensity. About five years ago she began to suffer from palpitation, and more recently from dyspepsia, which has increased very much during the past year. Her feet have been swollen at times, and she has also suffered from dimness of vision. Her urine is now of a specific gravity of 1010, and contains no albumen. Of course, it is impossible to say with which of the attacks of rheumatism she had endocarditis. This certainly occurred with one of them, and may possibly have done so with all. As this complication is most apt to occur with a severe attack it is probable that she had it with the first. Another thing that renders this probable is that the symptoms of which she now complains commenced five years ago, and, as a rule, endocarditis does not produce these symptoms of distress until several years have elapsed. A few words now as to the subsequent history of the case. Although the patient has the

four heart murmurs, I think the reason that she is suffering more than usual at present is because her general health is run down to a considerable extent. Perhaps there is no condition in which the system is so tolerant (if otherwise in good condition) as organic disease of the heart; and I think that after this woman has enjoyed a season of rest, with the best nourishment and appropriate tonics, she will feel wonderfully better in every way. This is an important practical point, but I cannot enlarge upon it at present.

Our next patient, a man in advanced life, as you see, has another serious trouble besides that of the heart, namely, locomotor ataxia; but I do not propose to discuss the latter on this occasion. I believe, if I remember rightly, that he has all the four murmurs also. On applying the stethoscope to the second intercostal space, a little to the right of the sternum, I find, as before, two murmurs, one with the first, and one with the second, sound of the heart. He has, therefore, both aortic obstruction and regurgitation. Again, at the apex there are the same two murmurs as in the other patient; so that here is a second instance of all the four murmurs existing in combination. I will call your attention in passing to the fact that notwithstanding he has all these murmurs the patient suffers very little from the condition of the heart. What gives him all his trouble is the locomotor ataxia.—*Boston Med. Journal.*

ARTHRITIS OF THE TEMPORO-MAXILLARY ARTICULATION.

Dr. Goodwillie, of New York, *Archives of Medicine*, gives the following history and treatment of this affection:—

Arthritic inflammation may be of a local or constitutional character. The former may be excited by dislocations, blows, luxations, or any lesions in neighboring parts. In the latter by some blood poison, viz.: syphilis, rheumatism, gout, scrofula, etc., and as such must have disease medicines that are antidotes or specifics to the particular blood poison. It is my desire to call attention to my method of producing *extension* in acute inflammation of this joint from either of the above causes.

A. P. B., of Hanover, N. H., 60 years of age, was brought to me by the late Prof. A. B. Crosby, M.D. He had been a man of very robust constitution, but for the past two or three years had suffered with attacks of gout, and was now certainly an object of pity to look upon. The gout from which he had suffered came with terrific violence in both temporo-maxillary articulations, and when he came into my office his teeth were chattering, like one in a malarial chill, from excessive irritation and spasm of the muscles of the jaw. This caused great pressure on the inflamed articular sur-

faces, and gave him excruciating pain, so that he got no relief except from the effects of morphine, hypodermically administered. The arthritis was preceded by neuralgia of the inferior maxillary nerve. On examination of the mouth, I found that his teeth had no decay in them, but some were very much worn by mastication upon the crowns, and some pulps (nerves) were exposed, and in consequence he had pulpitis, causing neuralgia that was followed by acute arthritis.

In the treatment nothing could be done with him except under the effects of morphine and an anæsthetic. On entering my office, a hypodermic dose of morphine was administered, and when under the effects of the drug, he was given nitrous oxide as an anæsthetic. This relieved him from pain, while consciousness to some extent remained. The pulpitis, the exciting cause of the facial neuralgia, was removed by protecting the exposed dental pulps (nerves) from the air and attrition by means of gutta-percha and an interdental splint. The principle of the treatment of arthritis in these joints is the same as in others, differing only in the method of application. I do not know that any extension appliance has ever been used for the relief of arthritis of this joint.



The method that I employ is as follows: In this case the patient was under the anæsthetic effect of morphine and nitrous oxide. If there is any rigidity of the muscles, cautiously force open the mouth and take an impression of either the upper or lower teeth, and a rubber splint is made from the cast to cover over all the teeth in one jaw. Upon the posterior part of this splint is made a prominence or fulcrum (D), so that when the mouth is closed the most posterior teeth close upon it, while all the anterior teeth are left free. The next step is to take a plaster of Paris impression of the chin, and from this make a splint (A). On each end of

the splint is made a place for fastening elastic straps (B) that pass up on each side of the head to a close-fitting skull-cap. See fig. When the apparatus is in place and the elastic straps tightened so as to lift the chin, then pressure is brought to bear on the fulcrum at the posterior molar tooth, and so by this means extension is made at the joints, and the inflamed surfaces within the joints are relieved from pressure; then immediate relief is experienced.

As soon as this apparatus was put on this patient, his pain stopped instantly, and he took no more morphia. He continued for a time his anti-gout remedies, and after some manipulations of the lame muscles of the jaws under electricity, perfect motion was restored. Three cases similar to the above are given in detail, and the Dr. concludes as follows:—(1) That arthritis of this joint, like all other joints, the result of local or constitutional causes, requires proper and prompt treatment, as it may pass in a very short time from its most incipient stage to one of suppuration and destruction.

(2) That arthritis without proper treatment more often results in fibrous ankylosis, and that bony ankylosis is the exception.

(3) That the highly developed muscles of the jaw, from pathological changes, the result of inflammation, or even from misuse, have always more or less impaired motion, and in some cases require more treatment than the joint trouble.

(4) Cases do sometimes occur in which the poisonous effects of overdoses of mercury have had a disastrous result.

[With some slight modification this appliance will be found well adapted to the treatment of fracture of the lower jaw.] ED. LANCET.

TENO-SYNOVITIS: ITS CAUSES, NATURE, SYMPTOMS AND TREATMENT.

BY WM. B. HOPKINS, M.D., PHILADELPHIA.

Teno-synovitis may be defined as an affection usually occurring in the forearm, and characterized by a peculiar creaking of the tendons as they move in their sheaths, depending upon a particular kind of strain to which the muscles belonging to these tendons have been subjected.

Cause—The predisposing cause of the affection is the occupation of the individual, and in studying, therefore, fifteen cases occurring in subjects of otherwise average health, the nature of their employment is worthy of special attention. In three of the fifteen the disease occurred in men employed in a dye-house, whose work consisted in wringing the goods, which had been soaked in the dye; in two the patients were weavers, who threw the shuttle from side to side with the index-finger

of the right hand; one case occurred in a baker, from kneading bread; one in a boiler-riveter, from hammering; one in a car-driver, from using the brake; one in an iron-moulder, from continued use of the shovel; one in a plaster-worker, from stirring plaster with a hoe; one in a washerwoman, from using a clothes-wringer; one in a labourer, who continued to work after receiving a severe contusion of the forearm from the fall of a heavy iron pipe; and one each in a rope-twister, a marble-rubber, and a painter.

In contrasting the above-named occupations with many others requiring far more muscular effort, and giving employment to many more workmen than these, the idea suggests itself that it is not the mere amount of strain to which the muscles and their tendons are put that predisposes to the disease, but rather the kind of effort, which is of a tedious, continuous, monotonous sort. On the other hand, trades which would appear likely to furnish subjects for the disease more frequently than those which have been already spoken of fail to do so. This in some instances can be explained. Gold-beating, for example, where an eight-pound hammer is used almost uninterruptedly for five hours, and is carried from above the shoulder down to the level of the waist would seem to contradict this view, as the disease is unknown to one of the largest gold-leaf manufacturers. A careful study of the movements of the operatives in performing this work, however, shows that the strain is not upon the muscles of the forearm, but rather on those of the shoulder and arm; as the hammer descends simply by gravity and returns by recoil from the elastic block, composed of alternate sheets of gold and animal membrane, to a point where the biceps and deltoid muscles complete the elevation.

The exciting cause of the attack is usually the resumption of work to which the individual is thoroughly accustomed, after a shorter or longer interval, when he is out of practice, and when the parts involved in executing special movements have become less actively nourished; though in the case of the washerwoman, the clothes-wringer was used for the first time, and the rope-twister was doing work which was new to him. In the laborer the attack was of traumatic origin.

Pathology.—The means of determining the exact lesion in this disease are necessarily to a certain extent conjectural, but as the pain and crepitation are coincident in their onset and subsidence, as there is no impairment of motion after recovery has occurred, and as the parts under treatment regain their normal condition in a very short time, it seems highly probable that there is no true inflammatory process at all, certainly none extending beyond the stage of congestion, and that the creaking which exists is due to insufficient lubrication, with consequent dryness, not, as has been sup-

posed, to exudation of lymph. Under rest and counter-irritation the congestion very soon disappears, the synovial surfaces pour out their proper fluid, and the tendons once more move smoothly and noiselessly in their sheaths.

Symptoms.—Soreness, amounting to positive pain upon motion or pressure along the course of the affected tendons, inability to use the part, and the presence of the peculiar creaking, which is communicated to the finger on palpation, are the symptoms which denote the existence of teno-synovitis.

Diagnosis.—From its common seat upon the dorsum of the forearm, this affection may be mistaken for fracture of the radius. The history of the case, however, showing that there has been no blow or fall, as a rule, the quality of the crepitus, which is much softer and finer than that of fracture, and like that of cellular emphysema after fracture of the ribs, or that produced by rubbing two pieces of cloth between the fingers, and the way in which the crepitation may be elicited, all leave little chance of error. The disease will not be mistaken for a strain of the muscle, if a careful physical examination is made.

Treatment.—From what has been already said, it will be seen that the disease is at once acute, painful, and disabling. It, however, yields, as a rule, readily to treatment; for the patient can seldom work more than a day after he is attacked, and finding that he exhausts the usual home embrocations, without relief, promptly seeks aid elsewhere. This enables the surgeon to institute treatment before an advanced stage is reached, and permanent mischief done by a deposition of plastic matter. Absolute rest of all the parts concerned is the most important element in the treatment; a palmar splint, therefore, from the elbow to the tips of the fingers, is applied, when the forearm is the part affected. Counter-irritation is next indicated, and may be employed in one of two ways. If the skin is red, a band one inch broad of tincture of iodine should be painted in an oval form around the area over which creaking is felt, while a lotion of lead-water and laudanum is applied within this band. In cases where there is but slight creaking, and no redness of the skin, tincture of iodine may be painted directly over the diseased part, without the employment of any lotion. The dressing is re-applied each day, until all pain, tenderness and creaking have disappeared, which generally occurs at the end of four or five days. After this a roller bandage alone is continued, until the parts have regained their tone.—*Louisville Med. News.*

THE "CHEMICAL LUNG."

On Tuesday night over twenty professional men and others interested in questions of sanitary sci-

ence met together to witness one of Dr. Neale's demonstrations of his "Chemical Lung." The main features of the "lung," and the principal uses for which it is designed, have more than once been described in these columns, either by ourselves or by the inventor of the apparatus. In its inception, the "lung" was, we believe, chiefly intended for the purification of the air in the tunnels of the Underground Railway, though it has not been accepted for this purpose. When the details of the scheme were laid before the directors of the company, either the official mind failed to understand them, or official acuteness perceived that so long as the public are willing to pay for travelling in a filthy atmosphere the company need not be so generous (or foolish) as to undertake any additional trouble or expense in efforts to make the air even tolerably pure. Such may be, and doubtless is, a sensible and proper view for railway directors to take. They are not professional philanthropists, and as regards those who have the charge of the Underground Railway, it may be predicted that when it can be shown that it is to their advantage and interest to make travelling on their line unobjectionable as well as convenient, they will adopt necessary measures and incur the requisite cost, but not till then. Meanwhile, the world is not made up of railway directors, and the "lung" will find fair scope for its activities elsewhere—as, for example, in theatres, churches, chapels, lecture rooms, hospital wards, out-patient waiting-rooms, police-courts, ships' cabins, cellars, etc.

The "Chemical Lung" is really a punkah of peculiar construction, and supplied with a solution of caustic alkali, for which many of the impurities of air vitiated by overcrowding have a special affinity. Not only are sulphurous and carbonic acid gases speedily removed from the atmosphere, but test experiments have shown that organic matters are likewise withdrawn by the "Chemical Lung," or punkah. The experiments performed on Tuesday night were similar to those described by Dr. Neale in our columns on March 11th (p. 415). Their success was *strikingly* and *marvelously* complete. In a room 18ft. by 15ft., 8ft. 6in. high, at the basement of the house, with the windows and door closed, fifty jets of a gas-stove were kept in full flame for an hour before the meeting. The temperature of the room was thereby raised to 85° Fahr. A quarter of an ounce of sulphur was then burned in the room, rendering the air almost irrespirable, except through handkerchiefs, and exciting violent coughing. The punkah, charged with a solution of caustic soda, was then set in motion. In ten minutes the temperature had fallen 15°, and though over twenty persons were present, each having an allowance of only 100 cubic feet, the air was rendered not only *comparatively* but *positively*, fresh, and actually productive of deep and

full inspirations. It is obvious that by means of the "Chemical Lung" not only may foul air be purified, but air may be prevented from becoming vitiated in crowded rooms, and this with *extraordinary certainty*, and at a cost and inconvenience that are almost inappreciable.—*The Lancet*.

TREATMENT OF HÆMORRHOIDS BY INJECTIONS OF CARBOLIC ACID.

Dr. Charles B. Kelsey, Surgeon to St. Paul's Infirmary for diseases of the Rectum, New York, recently opened a discussion on the treatment of hæmorrhoids, at a meeting of the New York Clinical Society, by reading a paper on the treatment by injections of carbolic acid. The paper, which appears in the August number of the "New York Medical Journal and Obstetrical Review," opens with condensed histories of a number of cases, after which he remarks that, beginning this plan of treatment without very much confidence in it, and with the fear of causing great pain, and perhaps, dangerous sloughing, constantly before him, the method is constantly growing in favour with him, and the more he practices it the more confidence he gains in it. With solutions of proper strength the danger of causing sloughing of the tumors is very slight. There are no objections to this method which do not apply equally to others. He has once seen considerable ulceration result from it in the hands of another; but he has seen an equal amount follow the application of the ligature; and he does not consider this as a danger greatly to be feared when injections of proper strength are introduced in the proper way. It is applicable to all cases; is especially adapted to bad cases; and may be used where a cutting operation is inadmissible. It acts by setting up an amount of irritation within the tumor which results in an increase of connective tissue, a closure of the vascular loops, and a consequent hardening and decrease in the size of the hæmorrhoid. Except when sloughing occurs, the tumors are not, therefore, removed, but are rendered inert, so that they no longer either bleed or come down outside of the body. In cases in which the sphincter has become weakened by distension, the injections will also have a decided effect in contracting the anal orifice, as injections of ergot or strychnine do in cases of prolapsus. He has used this method of treatment now many times, and has never, except in one case, had reason to regret using it or to be dissatisfied with its results, so far as he has been able to follow them. Although slow to advocate any one treatment of this affection to the exclusion of all others, he now generally adopts this from the outset in each case, reserving Allingham's operation for any in which the injections may fail. As yet he has met with no such case.

Its advantages over all other methods, provided its results prove equally satisfactory, are manifest. The patient is not terrified at the outset by the prospect of surgical operation, is not confined to his bed, and is not subjected to any suffering. The cure goes on painlessly, and almost without his consciousness. The method requires some practice and some skill in manipulation, in getting a good view of the point to be injected, and in making the injection properly; but this is soon acquired; and he is more and more convinced that the fear of producing ulceration is an exaggerated one, and that when ulceration is produced it is a result either of a solution of too great strength, or of one improperly administered.

[The strength he uses is one of carbolic acid to six of glycerine and six of water; of this *five* minims are injected into each tumor at intervals of a week.]
ED. LANCET.

A METHOD OF PREVENTING THE NECESSITY FOR INDUCED ABORTION.

Dr. Depaul, in one of his recent lectures, recommends, in certain cases, iodide of potassium, regulated diet, and bleeding, to diminish the size of child, and to prevent the necessity of bringing on abortion. He cited the following case in support of his recommendation: Thirty years ago a merchant had married a very rickety wife, who became pregnant soon after marriage. A medical man was consulted, and scarcely knowing what to do under the circumstances, he asked that M. Paul Dubois might be called in, who was obliged to perforate the cranium. A second pregnancy occurred, and on this occasion M. Dubois sent the young woman to M. Depaul. She was then four or five months advanced in pregnancy. Her pelvis measured from $7\frac{1}{2}$ to $7\frac{3}{4}$ centimetres. He told her that it was necessary, in order that she might have a living child, gradually to diminish the quantity of food she took, and to subject herself to a rigorous diet. She was bled many times, and gradually lessened the proportion of food, according to his directions. He followed the progress of the pregnancy, and especially the increasing dimensions of the child. The eighth month arrived, and it appeared to M. Depaul that until then the child had grown very little. He let things take their course, thinking it necessary to bring on premature delivery. Finally, the woman came to the end of the ninth month, and Dr. Depaul was sent for. The head soon cleared the sacro-vertebral angle, and the delivery was easy. The child, a boy, lived; he was very small, but was quite strong enough to be brought up. The same person again became pregnant for the third time. She did not communicate the fact to M. Depaul,

and it was only when she was eight months and a half gone that he was sent for to attend her. It was too late to have recourse to the means used in the previous pregnancy, and Dr. Depaul was obliged to perform cephalotripsy. In a fourth pregnancy he received notice in good time. The regimen used in the second pregnancy was again successful. The child lived, and is still alive. A fifth time he was only called in at the moment of delivery, and only succeeded in removing the child by cephalotripsy. M. Depaul considers this case to be very conclusive, and has likewise collected a certain number of similar facts which induce him to affirm that this method may have a certain degree of success, and to recommend it in cases of vicious conformation of the pelvis, so as to avoid, as far as possible, forced abortion.—*British Med. Journal*.

THE HIPPOCRATIC OATH.—I swear by Appollo, the physician, and by Æsculapius, and Health, and Allheal, and all the gods and goddesses, that, according to my ability and judgment, I will keep this oath and this stipulation: To reckon him who taught me this art equally dear to me as my parents, to share my substance with him, and relieve his necessities, if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the art to my own sons and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give a woman a pessary to produce abortion; with purity and holiness I will pass my life and practice my art; and I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption, and further, from the seduction of females or males, of freedmen and slaves. Whatever, in connection with my professional practice or not in connection with it, I see or hear in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times. But should I trespass and violate this oath, may the reverse be my lot.

SCIATICA.—In a clinical lecture on sciatica, Mr. Jonathan Hutchinson (*Medical Times and Gazette*), says, "In nineteen cases out of twenty in which the diagnosis of 'sciatica' is suggested, there is no affection of the sciatic nerve whatever. They are simply cases of arthritic disease of the hip in one or other of its various forms, acute gout, chronic gout, rheumatic gout, subacute rheumatism, or chronic senile rheumatism. Both by the public and the profession these cases are constantly called 'sciatica.' Our work-house infirmaries are full of chronic cases under that name, and I speak advisedly when I say I feel sure that they are almost all examples of *morbus coxæ senilis*. Of the cases of 'sciatica' which are not hip-joint rheumatism, some are probably affections of the fascia or periosteum near to the hip; a minority are possibly affections of the sciatic nerve itself. In these latter it is the sheath of the nerve which becomes painful. The pain may be darting or may radiate, but it does not pass down the nerve-tubules or in any way make the patient conscious of their course. The diagnosis of true sciatica is to be based upon the discovery of tenderness restricted to the trunk of the nerve, and involving a considerable part of its course. Examples of this are decidedly rare, and their recognition without risk of error is a matter of great difficulty.

BEST METHODS IN PRACTICE.—Dr. Jennings, in the *Peoria Med. Monthly*, says: "In the contest for business and money that most of us are engaged in, I have noticed that those who do the best work win; not necessarily the most profound and learned, but the men who are up with the times—the most industrious, and have an eye for improvement in ways and means. Practitioners of medicine are no exception to this rule. The routine doctor who takes but one medical journal, and confines himself to the identical formulas, medicines and instruments recommended by his college professors twenty years ago, is not the one to win patronage. I am called to treat a case of pneumonia, or rheumatism, or cholera-morbus—complaints that every doctor is presumed to know how to manage. It is not enough that the patient recovers; he would most likely do that without my aid; but I want the recovery to be quick and the means used safe and agreeable. In short, I want to use the best methods; and this may make all the difference in the long run between success and failure. A physician who provides himself with the best appliances of the art, and who studies to make his prescriptions safe, and pleasant to the eye and taste, though the mortality in his practice is no less than that of his routine neighbour, will secure the best patronage and take the most satisfaction in his business. The best methods are not confined to any particular branch or school of the profession, but may include much even of

empiricism. Nothing, it is true, gives the practitioner of medicine so much satisfaction as having established facts and fixed rules to bear on every case that comes under his care; this is what distinguishes the educated physician from the mere empiric; yet not every case can be successfully treated on "general principles;" and we shall often find ourselves obliged to fall back on experience (our own or that of others) without regard to the why or wherefore. And this, it appears to me, is the most important function of the medical journal, namely: to furnish that interchange of experience, and that medium for the discussion of ways and means which is necessary to develop the best methods in the practice of medicine.

It is amazing how soon one finds himself far in the rear if he drops the periodical literature of the profession even for a short time. Two years of experience in southern California without a medical journal, placed the writer of this so far behind the times that he was ashamed to meet his medical brethren, when at the end of that time he resumed practice; and it was several years before the lost ground was recovered.

Speaking in less general terms, it would be profitable to inquire, for instance, what is the best method of utilizing the practical portions of our periodical literature for future reference? To what extent shall we patronize "new remedies" and expensive pharmaceutical compounds? To what extent dispense our own medicines? What attitude assume toward Homeopathy? It is easier to ask questions than to answer them, but there are scores of such which occur to the medical man, besides the more important ones relating to the management of disease and remedies, the answer to which involves a consideration of methods.

NEW INSTRUMENT FOR LOCAL ANÆSTHESIA.—The London *Medical News* says: "In *Le Progrès Médical* for Saturday last there is contained an account of an ingenious and novel instrument invented by Dr. de Lesser, of Leipzig, the principle of which consists in the application of metal plates, cooled by rapid evaporation of ether, to the surface about to be operated on. The apparatus consists of a nickel case, the base of which is slightly concave, and can be applied to any rounded surface of the body, as the fingers, arms, tumors, buboes, etc. Another side is convex, for adaptation to depressions on the body surface, and it always ensures that a sufficient area shall be influenced by the cold. Two tubes open into this box; through one air can be driven by a hand syringe, through the other ether is introduced. By the passage of the air the rapidity of evaporation can be controlled, and a high degree of cold produced, which, reacting through the conducting sides of the box on the skin to which it is applied, brings about very considerable local anæsthesia. Its inventor

has obtained excellent results with the machine in extirpation of foreign bodies, disarticulations, amputations, etc., of the fingers, and in operations on the nails. He, however, first applies Esmarch's bandage to the part, whether limb or digit, to be operated on. The plan has also been successfully adopted in freezing substances for cutting into microscopic sections."

ARSENIC A PROPHYLACTIC AGAINST INFECTIOUS DISEASES.—Dr. Walter G. Walford, in a letter to the London *Lancet* of May 20th, proposes the administration of arsenic to persons exposed to scarlet fever and diphtheria, believing that if the drug be given in full doses during the incubative stage of these affections, it will forestall their development or modify them to such an extent that they may be treated as trivial ailments. Believing in the germ-theory of the cause of diphtheria and scarlatina, and having noted a statement to the effect that a person who is under the influence of arsenic can not be successfully vaccinated, he began to administer the drug to children not previously afflicted with the disease, in whose families there was an outbreak of scarlatina. During a period of several years he had submitted about one hundred children so exposed to this prophylactic treatment, and among this number two only had developed scarlet fever, and in these the disease presented itself in a very mild form. His experience with the drug as a preventive of diphtheria is limited to his two sons, whom he removed from a school where from local conditions diphtheria had attacked six of the boys, two cases being fatal. Under the administration of arsenic the younger son did not develop any symptom of the disease; but the elder, who was complaining of soreness in the throat at the time he was placed under treatment, showed after six days two small but unmistakable patches of diphtheritic false membrane on his fauces, "although his temperature never rose above 100° F., and his health and spirits scarcely flagged." In a few days he was well. The preparation employed by Dr. W. is the liquor arsenicalis (P. B.). He gives it at first three times a day in as large a dose as can be safely used, due regard being had to the age of the child. Each dose of arsenic may be combined with from fifteen minims to a half drachm of sulphurous acid and a small quantity of the syrup of poppy. This makes a pleasant mixture, of which the children are fond. He thinks that arsenic might be made available as a preventive against many other affections, among which he mentions hydrophobia as an extreme test of its prophylactic qualities.—*Louisville Med. News*.

PHYSICAL DIAGNOSIS.—I have often felt, when seeing hospital patients worried by hammering and long listening to their breathing, in order that the

physician might map out nicely the diseased territory the boundaries of which he could not alter, as if it were too much like the indulgence of an idle and worse than idle curiosity. A confessor may ask too many questions; it may be feared that he has sometimes suggested to innocent young creatures what they would never have thought of otherwise. I even doubt whether it is always worth while to auscult and percuss a suspected patient. Nature is not unkind in concealing the fact of organic disease for a certain time. What is the great secret of the success of every form of quackery? *Hope kept alive.* What is the too frequent fatal gift of science? *A prognosis of despair.* "Do not probe the wound too curiously," said Samuel Sharp, the famous surgeon of the last century. I believe a wise man sometimes carefully worries out the precise organic condition of a patient's chest when a *very* wise man would let it alone and treat the constitutional symptoms. The well-being of a patient may be endangered by the pedantic fooleries of a specialist.—*Boston Med. and Surg. Journal.*

THE ADMINISTRATION OF CHLOROFORM.—The *Gazette des Hôpitaux*, at the end of the *résumé* of the prolonged discussion on this subject which has just terminated at the Académie de Médecine, furnishes the following account of the rules of procedure observed by a *collaborateur* who has been much employed, with constant success, in the administration of chloroform during the last ten years:

1. The compress is to be preferred to all other means. A handkerchief is to be had everywhere, and alarms the patient less than anything else.

2. Fold the handkerchief into the form of the mouth of a horn, and keep it closely pressed against the point of the nose; but only pour the chloroform on the part of it which is not directly in contact with the skin.

3. Its application should be intermitted, but this need not be done in the precisely regulated manner recommended by Professor Gosselin.

4. Give very little chloroform at the commencement, in order to accustom the patient to it and prepare him for the feeling of suffocation. Then, when the first inspirations are over, pour on the chloroform very often, otherwise much time will be lost and complete anæsthesia obtained only with difficulty.

5. Before making the application take care that no article of dress constricts the patient, removing even the string of a cap.

6. Expose the epigastrium, and from the very commencement keep the eye upon it, and *constant* ly watch the respiration, without caring about the pulse.

Always have a forceps within reach.

8. As soon as the respiration becomes noisy and stertorous, remove the compress and allow the patient to breathe fresh air for a time.

9. When respiration is arrested, seize the tongue with the forceps and draw it out, and immediately commence artificial respiration. If the respiration is not reëstablished after a few seconds, place the head low, forcibly flagellate the cheeks, keep the tongue out, and continue the artificial respiration for five, ten, fifteen, or even twenty minutes, if necessary.

10. When the respiration is noisy, pass into the back of the throat a sponge mounted on a forceps, in order to remove the mucosities existing there, as they frequently do in patients suffering from colds.

11. There is but one contra-indication to the employment of chloroform—namely, advanced phthisis. Affections of the heart are not contra-indications.

12. Hysterical subjects should be distrusted.

13. Alcoholic subjects are very long and difficult in being brought under the influence of chloroform, but they may take it without danger.—*Med. Times and Gazette.*

TWO NEW ANTISEPTICS.—M. G. Le Bon has just presented to the Academy of Sciences two new and very effective antiseptics, the glyceroborate of calcium and the glyceroborate of sodium. Both of these compounds have the advantages of being very soluble, destitute of odor, and free from all toxic action. When exposed to the air they both deliquesce with great rapidity, absorbing from the air an equivalent weight of moisture. Both alcohol and water dissolve twice their own weight of these salts. They are powerful antiseptic agents even in very dilute solution; the most effective in a therapeutic point of view appears to be the calcium salt. It is absolutely innocuous, and it can be applied in strong solution to so delicate an organ as the eye without bad results. In a hygienic sense both can be employed with advantage as disinfectants and as preservers of meat and other alimentary products. M. le Bon has transmitted meat simply coated with a varnish of the glyceroborate to La Plata, and it has arrived in a perfectly fresh and sound condition. He thinks both salts will prove very useful as antiseptics in Lister's mode of dressing wounds.—*Lancet.*

THE ROYAL COLLEGE OF PHYSICIANS ON MEDICAL ADVERTISING.—The Fellows of the Royal College of Physicians of London met in solemn conclave last week, to consider a resolution condemning advertisements of medical books in the lay press, and the giving of medical testimonials to the proprietors of mineral waters, medicinal preparations, etc. An animated discussion ensued, and ultimately the following resolution was passed: "That the system of extensively advertising medical works, and the custom of giving laudatory certificates of medicinal and other pre-

parations and medical and surgical appliances, whether for publication or not, is misleading to the public, derogatory to the dignity of the profession, and contrary to the traditions and resolutions of the Royal College of Physicians."

It was pointed out that extensive advertising in the medical press was deceptive, as tending to associate special names with particular diseases. An interesting feature of the debate was the confession by a distinguished physician, that he received five guineas for a certificate praising a "favorite natural aperient." We now know the value of the much-advertised recommendations of this water.—*Med. News*.

LIGATURE OF THE INNOMINATE ARTERY.—MR. THOMPSON'S patient died on Thursday, July 20, the forty-second day after ligature of the innominate artery. There was no recurrence of bleeding after the thirty-ninth day. The sinus was found to terminate in an ulcer, which involved the anterior wall of the junction of the innominate, carotid, and subclavian arteries. The innominate and carotid were filled with clot; the subclavian contained a clot occluding it to the extent of half an inch. The position of the ulcer was on the distal side of the ligature, the constricted portion of the innominate not being involved. The hæmorrhage had apparently taken place from the innominate, as there was a recent blood-stain on the cardiac side of the clot. None of the vessels were pervious to water forced in with a syringe. The aorta was atheromatous. Consolidation was proceeding satisfactorily in the tumor. Excluding the successful case of Dr. Smith, of New Orleans, this is the second longest survival on record, Graefe's case having reached the sixty-seventh day, and Cooper's the thirty-fourth.—*British Med. Journal*, July 29, 1882.

ACUTE PNEUMONIA WITH FIBRINOUS EXUDATION IN THE LARGE BRONCHI.—Dr. Cezary, of Algiers, calls attention to cases, happily rare, of acute pneumonia in which the fibrinous exudation extends to the large bronchi and plugs them up. In these cases there is absolute dulness, but the bronchial breathing and bronchophony and vocal fremitus entirely disappear. The characteristic expectoration is suppressed, dyspnea is extreme, and death occurs with orthopnea. The signs are those of pleurisy with great effusion. The differential diagnosis between this form of pneumonia and pleurisy is impossible. Dr. Cezary has twice punctured, thinking that effusion was present.—*Gaz. Hebdom.; London Pract.*

SHORT SIGHT A FASHION.—A recent order issued to the Russian army forbids any officer to wear either a *pince-nez* or eye-glass while in uniform. Spectacles also are only to be used upon

the issue of a medical certificate notifying that the wearer absolutely needs them. It seems that the fashion for eye-glasses and *pince-nez*, which has lately sprung up in the Russian army, has made four-fifths of the officers to have bad sight.—*Med. Times and Gazette*.

EXAMINATION OF SPERMATIC STAINS.—Vogel (*Wiener Med. Blatt.*, 1882) recommends the following method: The stain is softened with water, and in the moist condition is taken off with a knife, avoiding as much as possible the removal of any of the tissue on which it lies. A few small hairs are unimportant, however, as they are readily dissolved from the scrapings on the object-glass or slide with a drop of concentrated sulphuric acid. After two minutes one or two drops of tincture of iodine are added, the whole stirred carefully with a glass rod, and covered with a large cover-glass, which, if the dark-brown mass be too opaque, may be pressed down a little, unless it be intended to transfer smaller portions to other slides. The spermatozoa are stained distinctly brown, and are visible under the microscope in their whole contour, but it is not possible to keep the staining in longer than twenty-four hours unless the sulphuric acid be washed out, when the preparation is soon spoiled. Alcohol at once decolorizes the spermatozoa, showing the staining to be only superficial.—*Boston Medical and Surgical Journal*, August 10th, 1882.

NITRITE OF AMYL has been used hypodermically by Dr. J. J. F. Barnes, as described by him in the *British Medical Journal*. In thirty or more cases a ten per cent. solution in rectified spirit was used. No unpleasant results were observed. The action of the drug was immediate, and the phenomena were similar to those obtained by the ordinary method of administration. Ten minims of the solution, equivalent to one minim of the amyl, was the dose usually given by Dr. Barnes. He states that the solution in spirit, kept in an ordinary stoppered bottle, does not readily lose its efficiency.—*King's Co. Proceedings*.

HYDRATE OF CHLORAL AND TINCT. IODINE.—According to the authority of Pavesi, the therapeutic powers of tincture of iodine are increased by the addition of chloral hydrate, which dissolves in it without decomposition, and is readily miscible with water without precipitation. This combination possesses remarkable hemostatic virtues, from its marked coagulating powers over albumen.—*Pacific Medical Journal*.

Billroth having declined to leave Vienna, Prof. Volkmann, of Halle, has been chosen as Langenbeck's successor at the University of Berlin.

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The LANCET has the largest circulation of any Medical Journal in Canada.

TO OUR READERS.

The ever-increasing success of the LANCET is to us a matter for congratulation, and we enter upon the 15th volume with a determination to continue the high standard we have already maintained, and if possible to make the journal still more worthy of the support and encouragement of the profession in Canada. Owing to the very large and increasing circulation of the LANCET, it is much sought after by advertisers who find it to their advantage to patronize journals of large circulation; we have therefore been compelled to increase the number of our advertising pages. We wish our readers, however, distinctly to understand that this does not in any way diminish the amount of reading matter. We give precisely the same amount of reading matter every month, whether the advertisements are few or many. We make this statement because of an impression which prevails in some quarters, that the number of advertising pages being increased the reading matter is necessarily diminished. A casual reference to the pages of the LANCET for the past ten years will show that this is not the case.

SODIUM SALICYLATE IN ACUTE RHEUMATISM.

After a prolonged trial of salicylate of soda in the treatment of acute rheumatism, the profession has come to regard it as one of the most valuable remedies yet introduced into the materia medica. As to its *modus operandi*, observers are by no means agreed, although many believe that its

action is as nearly specific as is the action of quinine in intermittent fever. In an article in the *Practitioner* for June, '82, Dr. Clouston says that its effect on the duration of the disease is most marked, for in 63 per cent. of the cases the acute stage did not last over three days; the pain was relieved in a few hours, and the remainder of the sickness was free from severe symptoms. He publishes a table showing the results obtained by other observers, nearly all of whom agree as to the value of this remedy, and also that the tendency to complication is diminished in proportion to the shortening of the acute stage, and that relapses are less frequent. Dr. Clouston believes that success in the treatment depends, to a considerable extent, upon the quantity administered at each dose, for if it be too small the acute stage will not be cut short, or the pain relieved, and if too large, headache or other uncomfortable symptoms will be produced. The dose recommended as the best in the majority of cases, is 10 grains every hour until the symptoms are relieved. If, from any cause, he finds it necessary to suspend the sodium salicylate, he administers salicine in doses of 15 or 20 grains three times a day, partly with a view to its tonic effect on the system, and partly from its well-known efficacy in the treatment of the disease under consideration salicine being converted into salicylic acid in the system. Dr. Clouston gives an epitome of 27 cases treated by him, from which the following conclusions may be drawn: viz., that the best results are obtained by early treatment, and that after the acute symptoms have disappeared, the medicine should be discontinued gradually, and if any signs of a relapse appear, it should be immediately resumed. We have used salicylate of soda for several years, both in hospital and private practice, and can fully endorse Dr. Clouston's conclusions. The prescription we generally use is as follows:—

R. Acid salicyl..... \mathfrak{z} ij.
Sodæ carb..... \mathfrak{z} iss.
Syr. limonis..... \mathfrak{z} ij.
Aquæ cinnam...ad. \mathfrak{z} viii.—M.

Sig.—A table-spoonful every two hours.

Some physicians give as high as 20 grains every two hours, but there is danger of sudden collapse from large doses of this remedy. Dr. Brinton (*Medical and Surgical Reporter*) administers it in 20 grain doses every two hours until the pulse is reduced, and states that in 20 grain doses there is

no danger of collapse so long as the pulse does not fall below 84 to the minute. Even if heart lesions be present, by watching the pulse carefully all danger from collapse may be avoided. He combines it with liquor ammoniæ acetatis, and thinks it acts better than when given alone.

SEWERAGE AND DISPOSAL OF SEWAGE.

Our morning contemporary, the *Toronto Globe*, has been doing good service in drawing public attention to the necessity for a system of sewerage for Toronto and its suburbs, and in acquainting the people with the topography of the different localities, and indicating the best course for some of the future trunk sewers. There are a few points which the *Globe's* articles bring to mind, and to which we deem it desirable to draw attention.

The great want of the present system, indeed, the absolute necessity, is some means by which the sewage of the city shall be diverted from the bay. It is a sad fact that such a vast amount of filth has already been poured into what should be, but is not, a delightful basin of pure water. There are three ways in which this may be accomplished, all of which were fully discussed in the *Journal of Sanitary Science*, several years ago. One of these modes is similar to that proposed in the *Globe*; the other two aim at returning to the soil that which is taken from it in the growth of vegetation or food. There are two strong reasons why one of these ought to be adopted; one is, that such a course would prevent such serious impoverishment of the soil as has taken place in some of the New England States, the possibility of which in Ontario ought not to be overlooked by either the urban or rural population; and the other that the earth, especially in connection with the processes of vegetation, is a wonderful disinfectant, and will effectually prevent any future evil effects upon health, of the decomposition of the excremental matter in the sewage. The dry earth system, with daily removal by cartage, is safe, gives perfect freedom from sewer gases, and is successfully carried out in some large cities; but as Toronto is virtually committed to the water-carriage system, that system need not now be discussed. With the water-carriage system at present adopted, there are two methods by which the sewage might be utilized in the soil and disinfected or destroyed,

viz., by the manufacture of a portable manure, or by the application of the fresh undecomposed sewage to the soil, by irrigation or downward filtration, and it is a question, which should be seriously considered instead of being put aside as impracticable, whether it would not be better to have the sewage of the city used in one of these ways, even at considerable cost to the city, than to continue to pour it into the water front of the lake, with the constant risk of air and water contamination.

Both east and west of Toronto there are many hundreds of acres of light unproductive soil which might profitably utilize the sewage of the city. In England enormous quantities of vegetables and grass for the grazing of cattle are grown upon soil which had been previously almost barren; and near Paris a gravelly waste has been converted into luxuriant beds of garden produce, by the application of fresh sewage to the soil. There, it is thought best to have the sewage safely disposed of in this way, even if it means an annual outlay of considerable money by the cities interested. It would be more economical to have the Toronto sewage manufactured into a portable manure or pumped upon a sewage farm, than to build a trunk sewer to carry it from the Don to deep water near Scarboro' Heights.

In any case, an intercepting trunk sewer along Front Street to the Don may be regarded as indispensable, and the sooner it is built, with proper provisions, the better. There are two special points in connection with it to which we would desire to draw attention: First, the effect upon the atmosphere of the eastern section of the city of pouring all the sewage into the water at one point by the trunk sewer, instead of, as at present, at many points hundreds of yards apart, and the greater risk at the same time of contamination of the water supply. Pouring a large quantity of sewage into the still water of the lake is a very different thing, it must be remembered, from pouring it into a flowing river.

The second most important point to be considered in connection with the trunk sewer is, that in all intersecting sewers like the one proposed, there is great liability to increased accumulation and return of the sewer gas. This great disadvantage must be overcome before the requirements of public health can be regarded as satisfied. The

flow of the proposed intercepting sewer for a considerable part of its course, will be in a measure the reverse of that in the present main sewers which will pour into it, that is, toward an acute angle with the flow in the supply sewers; as from a point some distance west of Yonge street the trunk will have to take a course bearing much northward of east. The difficulty here indicated can be partially remedied by altering the direction of the lower end of the present main sewers and turning the flow in them toward the south-east for as great a distance as possible before they connect with the main trunk. Closed pipes will accumulate, retain, and, in certain conditions, return vapors and gases generated in them unless these are constantly removed by some special system of ventilation, and the great desideratum in sewerage reform is some efficient method by which these vapors and gases, generated and given off in the decomposition of the sewage in its usual slow or retarded passage through the common sewers, shall be either destroyed, or, if that be impossible, carried a safe distance away. Open gratings in the streets of a populous district are as the *London Lancet* says "not simply nuisances, but traps for the unwary." There is no question as to the poisonous nature of sewage-gas, and from open street gratings it may not be perpetually given off, but come out in gusts, as determined by the varying distribution of heat in the sewers and the relative temperature of the external atmosphere, and be inhaled by the travelers on the streets, or in a calm atmosphere it may even enter in poisonous quantities an open window of a neighboring dwelling. It is consequently unsafe and not in accordance with the requirements of health to ventilate the sewers directly into the streets, as is now done in Toronto and most cities. With an intercepting trunk sewer the danger would be greatly increased; and this not only in connection with the street-gratings but also in connection with the traps of the house-drains and soil-pipes.

The only safe and rational plan, as it appears to us, is to ventilate the sewers by pipes of different heights rising above the level of the houses, so that the gases may be conveyed to and mingled with the higher strata of the atmosphere, beyond the reach of respiration; and to have fitted to every house a properly constructed "disconnecting chamber," for cutting off any flow of gas tend-

ing toward the house. In conclusion, it may be stated that provision for the frequent and free flushing of the sewers, to prevent decomposing accumulations, will greatly lessen the amount of gases in the sewers, and consequently the danger therefrom.

THE TORONTO CITY HALL.

The unhealthy condition of the Toronto City Hall has been a matter of public notoriety for some time past, but as yet no steps, so far as we are aware, have been taken to put it in a healthy condition. This neglect is owing in great part to the conflicting opinions respecting the possibility of making the hall habitable from a sanitary point of view, and to the suggestion that new buildings would be required. A report of the condition of the City Hall was made in February last by Dr. Oldright but it is of a piece with all his public utterances, so utterly unpractical as to be almost completely valueless. In the report he has given a very full description of the filthy, and defective sanitary condition of the building, but not one practical hint as to how it may be remedied. He jumps at once to the conclusion that a new City Hall is absolutely indispensable. This opinion, as the *Globe* very properly remarks, "is utterly unwarranted. The statement that the condition of the Hall is beyond remedying is on the face of it, the absurdest of nonsense. To assert it, is to say that sanitary science is a humbug, and boards of health mere shams." We regret very much that at the very outset of our career in sanitary reform, such a report as the one above alluded to, should have become public, as it casts a serious reflection upon the resources of sanitary science to say that the defects in the drainage, ventilation, etc., of the City Hall cannot be remedied, except by the construction of new buildings. It will be in the recollection of some of our readers that at one time in the history of the Toronto General Hospital, that building was in a somewhat similar condition to the City Hall at the present time, and there were so-called sanitarians and unpractical men who said it never could be improved, and that new Hospital buildings, would have to be erected in some other part of the city; but fortunately for the Hospital, some practical men on the board of trustees, assisted by the medical superintendent and

a competent architect, took the matter in hand and very soon the buildings were put in a perfectly sanitary condition, and to-day there is no public institution in this city or country more perfectly drained and ventilated, or in a cleaner or healthier condition.

The suggestion of a leading alderman "that the matter should be gone into by some *competent* person to see if the buildings could not be put into a healthy condition" is a good one. Two prominent citizens, men of great experience, estimate that the cost of overhauling, draining and ventilating the City Hall including the substituting of steam-heating apparatus, need not exceed \$2,500. For a few hundred dollars a layer of fresh earth and a concrete floor could be put under the entire building, and thus for less than \$3,000 the building could be made perfect in a sanitary sense.

From the remarks in the *Globe* anent Dr. Oldright's report, Mr. Gordon Brown must also have come into "rivalry with that gentlemen" in some way, or perhaps the latter "has beaten him in a contest for the senate of Toronto University, several years ago."

AMMONIA IN BREAD-MAKING.—The *Scientific American* in a recent article, calls attention to the popularity and usefulness of carbonate of ammonia as a leavening agent. It says:—The carbonate of ammonia is an exceedingly volatile substance. Place a small portion of it upon a knife and hold over a flame, and it will almost immediately be entirely developed into gas and pass off into the air. The gas thus formed is a simple composition of nitrogen and hydrogen. No residue is left from the ammonia. This gives it its superiority as a leavening power over soda and cream of tartar when used alone, and has induced its use as a supplement to these articles. A small quantity of ammonia in the dough is effective in producing bread that will be lighter, sweeter, and more wholesome than that risen by any other leavening agent. When it is acted upon by the heat of baking the leavening gas that raises the dough is liberated. In this act it uses itself up, as it were; the ammonia is entirely diffused, leaving no trace or residuum whatever. The light, fluffy, flaky appearance, so desirable in biscuits, etc., and so sought after by professional cooks, is said to be imparted to them only by the use of

this agent. The bakers and baking-powder manufacturers producing the finest goods, have been quick to avail themselves of this useful discovery, and the handsomest and best bread and cake are now largely risen by the aid of ammonia, combined of course with other leavening material.

THE ROYAL COMMISSION ON THE MEDICAL ACTS.—The report of the Royal Commission on the Medical Acts has just been published in the London journals. The most important clause is the following: "There shall be one General Medical Council; that in each of the three divisions of the United Kingdom, there shall be a Divisional Board, representing all the medical authorities of the division; that the right of admitting to the *Medical Register* and a general control over the proceedings of the Divisional Boards shall rest in the Medical Council; and that subject to such control, each Divisional Board shall, in its own division conduct the examinations for licence." This arrangement, as will be seen, is somewhat similar to that which prevails in Ontario, except that there will be three examining boards instead of one. The Commission also proposes that persons with Colonial diplomas may register in England without further examination as *Colonial practitioners*.

CANADA MEDICAL ASSOCIATION.—The following titles of promised papers have been received up to August 23rd. New Operation for Closure of Hare Lip and Fissured Palate immediately after Birth.—Dr. Goodwillie, New York. Stone in the Bladder.—Dr. Walker, Detroit. Some Points in Forceps' Application.—Dr. A. A. Brown, Montreal. The Electro-Magnet in Ophthalmic Practice.—Dr. Dr. Buller, Montreal. Exhibition of a Series of Specimens Illustrating the Modes of Termination of Aneurism.—Dr. Sutherland, Montreal. Axis Traction.—Dr. J. C. Cameron, Montreal. Cervical Ribs, and Notes on the Treatment of Mammary Abscess.—Dr. Shepherd, Montreal. Exhibition of (1) Model of a Gynecological Couch; (2) of a new form of Speculum; (3) of an Ether Inhaler.—Dr. Alloway, Montreal. Rare Form of Uterine Tumour.—Dr. Gardner, Montreal. On Certain Obstructions in the Air Passages.—Dr. Hingston, Montreal. Echinococcus Disease in America.—Dr. Osler, Montreal. Demonstration of the Bacillus of Tuberculosis.—

Drs. Osler and W. D. Oakley. A Peculiar Form of Fever.—Dr. Harrison, Selkirk. Polypoid Fibroma, of the Bladder.—Dr. Fulton, Toronto. Parasitic Affections of the Ear, and three Cases of Eczema.—Dr. J. Ferguson, Toronto.

CARBOLIC ACID INJECTIONS IN PUERPERAL SEPTICÆMIA.—In the August number of the *N. Y. Medical Journal*, Dr. Polk, of the Medical Department of the University of the City of New York, reports a case of puerperal septicæmia in which hypodermic injections of a two and a half per cent. solution of carbolic acid were followed with excellent results. The solution was warmed to 100 F. and injected every four hours. The temperature was almost immediately reduced when it was used, and went up again when its use was discontinued for a very short time. The urine was examined as a precautionary measure, to determine the amount of sulphates present, and this was repeated from time to time, as it is maintained that absence of the sulphates is the first sign of carbolic acid poisoning. The urine was tested as follows:—A drop or two of nitric acid was first added to dissolve the phosphates, if present; then a solution of barium chloride, the reaction causing a white precipitate of barium sulphate. This plan of treatment is worthy of a more extended trial.

MICROCOCCI IN THE BLOOD IN MALIGNANT MEASLES.—Dr. Keating, of Philadelphia, has been making some investigations with regard to the presence of micrococci in malignant measles, and their absence in the milder cases. His article will be found in the *Medical Times*, August 12th, 1882. He states that the moment malignancy appeared, an examination of the blood showed micrococci in abundance in the field. He says that they not only obstruct the capillary circulation, but enter and destroy the blood corpuscles. Upon the strength of Dr. Formad's experience that *alcohol* most readily checked the development of micrococci in culture solutions, he withdrew the carbonate of ammonia and digitalis treatment and put his little patients upon whiskey in small and frequent doses, combined with tonic doses of citrate of iron and quinine, and the results were highly satisfactory. He alludes in this connection to the well-known efficacy of alcohol and calomel in puerperal septicæmia. He also refers to the value of alcohol and corrosive sublimate, and the

vegetable acids, as lemon juice and claret in malignant diphtheria.

MEDICAL SECTS IN THE U. S. ARMY AND NAVY.—The Committee on Medical Legislation of the American Institute of Homœopathy recently corresponded with the head of the Medical departments of the United States Army and Navy, in order to ascertain if any discrimination was made between the diplomas of Homœopathic Medical Colleges and those of the "regular school" in the admission of candidates to examination for the medical corps. Mr. Chandler, Secretary of the Navy, replied that no discrimination was made in favour of or against any school. "The only requirements of the department are that a candidate in addition to his moral and physical qualifications shall possess the necessary professional and literary knowledge to enable him to pass the established examination."

ONTARIO PUBLIC HEALTH DOCUMENTS.—We have received a communication from "Mild Critic," too late for this issue, suggesting that "in view of the outraged English in the construction of the documents being issued by the Provincial Board of Health, and of the incorrect and imperfect character of the instructions," a "resolution be passed at the coming meeting of the Medical Association asking the Registrar-General to have them withdrawn as far as possible, and revised and corrected before any further distribution of them be made. The writer thinks that the profession outside of Canada, where many of the documents will doubtless go, should not be allowed to think that the profession here are in ignorance of the character or approve of such literature—the like of which "was never issued from any Governmental department."

NOVA-SCOTIA MEDICAL SOCIETY.—The 13th annual meeting of the above-named society was held at Kentville, N. S., on the 28th and 29th of June, 1882. Dr. H. McPherson, of North Sydney, Vice President in the chair. The following officers were selected for the ensuing year:—President, Dr. W. B. Slayter, of Halifax; 1st Vice, Dr. H. McPherson, of North Sydney; 2nd do., Dr. H. Shaw, of Kentville; Sec. Treasurer, Dr. J. Somers, of Halifax. The next meeting will be held in Truro, on the third Wednesday in June, 1883.

A GOOD OPPORTUNITY.—The proprietor of the Belmont Retreat, a Private Insane and Inebriate Asylum, in Quebec, being advanced in years, and feeling that resting time has come, would take a partner who might eventually become his successor, or, if an opportunity offered, would sell out. This is an excellent chance for a young medical man with capital, who would be willing to cultivate a taste for the management of such an institution. The above institution, which was established in 1864, stands in the middle of 30 acres of excellent land, in garden, meadow, and lawn, and has accommodation for about 50 patients. It has a Government license and an annual Parliamentary grant. For further particulars apply to G. Wakeham, Quebec.

PRENATAL HOUR-GLASS CONTRACTION.—Dr. Tyson, of Philadelphia, reports in the *Medical Times*, two cases of what is called "prenatal chaton," or hour-glass contraction, a rare occurrence in the early stages of parturition. He was led to publish these cases from observing a case in a New York Medical Journal, which, through mismanagement, (version and craniotomy) had terminated fatally. In his first case he used the forceps and overcame the resistance, and in the second, ergot and anæsthesia were all that was required.

LIGATURE OF THE VERTEBRAL ARTERIES FOR EPILEPSY.—Dr. Alexander, of Liverpool, reports (*Medical Times and Gazette*), the successful treatment of a number of cases of hopeless epilepsy by tying the vertebral arteries. He at first tied one artery, and this succeeded in three cases, but in other cases both vessels had to be ligated before a cure was effected. He has tied both vessels at the same operation with no bad results. For full description see quarterly retrospect in another column, by Dr. Stewart, of Brucefield, Ont.

ABDOMINAL DRAINAGE.—The following new method of drainage after ovariectomy adopted by Dr. Kehren, (*Centralblatt für Gynecologie*, 1882), is worthy of more than a passing notice. He inserted into the cavity of the abdomen three rubber tubes into which he introduced disinfected wicks of the thickness of the little finger. The external bandage was soon wet through by the secretion, and had to be changed three times during the first two days, after which it ceased altogether.

THE PROPOSED AMERICAN MEDICAL JOURNAL.—The *Medical Herald*, (Ky.) says: that Dr. I. Minis Hayes of Philadelphia is the only man in the country possessing all the requisites to successful editorship of the proposed Medical Journal of the American Medical Association, and nominates Dr. Hayes for editor-in-chief, and Dr. R. J. Dunglison assistant editor.

DUFFERIN RIFLES.—We are pleased to observe that Dr. W. T. Harris of Brantford, Surgeon to the above Battalion, has succeeded in winning the "Dufferin Medal." His score was 40 out of a possible 50, ten rounds at 500 yards. This is a highly valued prize, and Dr. Harris is to be congratulated upon his success.

BRITISH DIPLOMAS.—Drs. R. J. B. Howard, M.D., of Montreal, and M. A. Nicholson, M.D., of Ottawa, have successfully passed the examination for the diploma of the Royal College of Surgeons, Eng., and were admitted members in July last. H. W. Thornton, M.D. (McGill), and H. H. Chown, M.D. (Queen's), have been admitted licentiates of the Royal College of Physicians of London.

DISTINGUISHED VISITORS.—The following gentlemen are shortly expected to visit this country: Mr. Herbert Spencer, Dr. W. B. Carpenter, (author of "Human Physiology"), Dr. Morell McKenzie, Dr. Houghton, of Dublin, and Hon. Dr. Lyon Playfair. Dr. Carpenter is now in Montreal.

OBITUARIES.—The following deaths are announced in our exchanges:—Prof. Nikolaus Friederick, of Heidelberg, in the 57th year of his age; Prof. F. M. Balfour, the distinguished Embryologist; Dr. Wm. H. Mussey, of Cincinnati; and Dr. Andrew Buchanan, late Prof. of Physiology in Glasgow University, at the advanced age of 84.

SANITARY CONVENTION IN ST. THOMAS, ONT.—A sanitary convention will be held in St. Thomas, under the auspices of the Provincial Board of Health, on the 19th and 20th of September, inst. (See advertisement).

Dr. Roddick has become associated with Dr. Ross in the editorial management of the *Canada Medical and Surgical Journal*, Dr. Molson having resigned owing to other engagements.

HAMILTON CITY HOSPITAL.—The new City Hospital at Hamilton is nearly ready for the reception of patients. This fine building is an ornament to the city, and a much needed improvement.

REMOVALS, &c.—Dr. Blair has removed to Three Rivers, Que. Dr. J. G. Kittson, (formerly surgeon to the North-West Mounted Police), has commenced practice in St. Paul, Minn.

MEDICAL MATRICULATES TORONTO UNIVERSITY.—The following gentlemen passed at the June examination :—D. R. Johnston, 1st scholarship ; C. F. Noecker, 2nd scholarship ; C. S. Haultain, C. J. Patterson, J. B. Reid, and McJ. Farrish.

APPOINTMENTS.—Dr. J. W. Whiteford has been appointed Attending Physician to the Winnipeg General Hospital.

Dr. D. W. Cheever has been appointed Prof. of Surgery in Harvard Medical College, *vice* Dr. H. J. Bigelow resigned.

Dr. John Chiene has been appointed Professor of Surgery in the Edinburgh University as successor to the late Prof. Spence.

T. Grainger Stewart, M.D., of Edinburgh, has been appointed one of Her Majesty's Physicians, *vice* Sir Robert Christison Bart, deceased.

Prof. Nothnagel, of Jena, has been appointed Professor of Special Pathology and Therapy in the University of Vienna.

Prof. Bergmann of Würzburg has been appointed to the Chair of Surgery in the University of Berlin, vacated by the resignation of Prof. Langenbeck.

CORONER.—Dr. N. Washington, of Orangeville, has been appointed Coroner for the County of Dufferin.

The St. John *News* states that diphtheria is very prevalent at Grand Manan, N. B.

Books and Pamphlets.

THE PHILOSOPHY OF INSANITY, CRIME AND RESPONSIBILITY, by Henry Howard, M.R.C.S., Eng. Montreal : Dawson Bros.

Dr. Howard has been connected with asylums for the treatment of insane for nearly a quarter of a century, and therefore anything from his pen is deserving of a careful perusal. This we have endeavored to do, although we must confess that we

have had some difficulty in following the writer in his explanations of the supposed pathology of insanity. Dr. Howard's views are strongly materialistic. He regards imbecility as the result of teratological defect, and insanity the result of pathological defect in the brain. The work is divided into two parts ; the first part, consisting of 52 pages, is devoted to a "definition of insanity and imbecility," and the second part to the "medical jurisprudence of crime and insanity, criminal responsibility." The author fully explains his views on the vexed question of legal criminality. He has been much interested in the subject of the medical jurisprudence of crime and insanity for many years, having taken part in several criminal trials in which the plea of insanity was entered by the counsel for the defence. The late Hayvern case is still fresh in the memory of our readers. He was tried for the murder of a fellow-prisoner in the penitentiary named Salter. Dr. Howard, for the defence, testified that the prisoner was insane, and that he had committed the deed through "uncontrollable impulse." Notwithstanding this evidence, Hayvern was convicted and executed. A good deal of controversy arising out of the case took place at the time, and several excellent authorities, in the main supported Dr. Howard's contention.

He gives in his work the criticisms on the case which appeared in the different journals, and also an article on the "Brains of Criminals," by Dr. Osler, published in the *Canada Medical and Surgical Journal* for February, 1882. Although Dr. Howard recognizes stages of insanity, he does not approve of any such division of insanity as partial insanity, or moral, functional or idiopathic. Speaking of the cause of death in insanity, we are unable to accept the author's theory that it "is caused by the arresting of molecular motion, and that the cause is due to coagulation of nerve fluid, either from chemical change or mechanical lesion," or that "turbidity of the electric fluid" causes insanity. Some very interesting observations have been made by the author regarding low temperature in the insane. He gives a history of twenty-three insomnic and analgesic cases examined by him, in nearly all of which the temperature was from 1° to 2½° below normal.

By way of an appendix the author has given a number of extracts on criminal cases from Mr. Serjeant Ballantine's "Experiences of a Barrister's

life," which will be found interesting. In conclusion the author expresses his indebtedness to a number of friends for useful information and valuable assistance given him from time to time, and assures the judicial, legal and medical gentlemen who differed from him in his views of the mental state of Bulmer and Hayvern, that if in the heat of discussion he made use of one word that caused any of them annoyance, he did so unintentionally, and asks to be permitted to withdraw that word.

A POCKET-BOOK OF PHYSICAL DIAGNOSIS FOR THE STUDENT AND PHYSICIAN. By Edward T. Bruen, M.D., Demonstrator of Clinical Medicine University of Pennsylvania. Philadelphia: Presley Blakiston. Toronto: Willing & Williamson.

This is a quarto volume of 250 pages, devoted to the interesting subject of physical diagnosis. The author has been engaged in teaching diagnosis to private classes of post-graduates and others, and this hand-book merely contains the substance of the instruction given. Among general principles which he lays down in his introductory chapter is one which we have reason to believe is too often overlooked, viz: "that each result of the practice of physical diagnosis is based on the comparative examination of the two sides of the chest in each individual case." Considerable care and attention have been bestowed on the preparation of the work; the author's teaching is clear and concise, and evinces a complete mastery of the subject. The work is illustrated with a few wood-engravings.

CHEMICAL ANALYSIS OF THE URINE. By E. F. Smith, Ph.D., of Muhlenburg College, and John Marshall, M.D., Demonstrator of Chemistry, University of Pennsylvania. Philadelphia: Presley Blakiston. Toronto: Ure & Co.

There are a number of works on Urinary Analysis now on the market, and it would almost appear unnecessary to add another. The authors maintain, however, that none of the works so far issued, deal sufficiently with the chemical side of the subject, and they have endeavoured to supply the deficiency. The basis of this work is "Casselmann's Analysis," to which they have added numerous methods of analysis and suggestions which will enable the investigator to solve many problems met with in the analysis of urine. The work also contains a section upon the microscopic examination of urinary sediments, interesting alike to the student and practitioner.

ON HEMORRHOIDAL DISORDER. By John Gay, F.R.C.S., Senior Surgeon Great Northern Hospital. London: Churchill & Co. 1882.

The above memoir is a revised reprint of articles on this subject which were recently published in the London *Lancet*. The author discusses at some considerable length hepatic disorder in relation to hemorrhoids. In the matter of treatment, after giving the different procedures, such as styp-tics, cauterization, excision, crushing, evulsion, etc., the author states his preference for the ligature over all others.

CATALOGUE OF THE GERMAN GENERAL EXHIBITION IN THE DEPARTMENTS OF PUBLIC HYGIENE AND LIFE SAVING. Berlin: Th. Fischer.

This catalogue of 284 pages contains a complete list of everything which Germany has produced in these departments. The exhibition is to be opened in Berlin in the spring of 1883.

Fourteenth Annual Report of the Inebriates' Home, Fort Hamilton, N. Y., also a statistical report of six hundred cases of alcoholic inebriety, treated at the Inebriates' Home, from November 1st, 1879, to January 1st, 1881, by Lewis D. Mason, M.D., consulting physician.

THE VOICE IN DIAGNOSIS AND PROGNOSIS. By T. Wesley Mills, M.D., L.R.C.P. Lond. Assistant to the Professor of Physiology, McGill College, Montreal. Reprinted from the Canada Medical and Surgical Journal.

BRAITHWAITE'S RETROSPECT OF PRACTICAL MEDICINE AND SURGERY. Part LXXXV.—July. New York: W. A. Townsend, Publisher,

TENTH ANNUAL REPORT ON VITAL STATISTICS, FOR THE STATE OF MICHIGAN. Lansing: W. S. George & Co., Printers.

Births, Marriages and Deaths.

On the 7th ult., at Uniontown, Kas., the wife of Dr. A. L. Fulton, of a son.

On the 10th ult., Alexander Greenlees, M.B., of Toronto, in the 40th year of his age.

On the 28th of July, R. H. Wight, M.D., of St. Johns, Que., aged 69 years.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

REPORT OF THE SPECIAL COMMITTEE

APPOINTED "TO SEEK FROM THE DOMINION GOVERNMENT IMPROVED LEGISLATION IN RESPECT TO SANITATION AND VITAL STATISTICS."

Your Committee beg to report that efforts to induce the Dominion Government to comply with the oft repeated request of this Association, to take some action in relation to Public Health and the Vital Statistics of the Dominion, have been continued, and every suitable means adopted to accomplish that result. In the report I had the honour to submit at the last meeting of the Association, I remarked that Sir J. A. Macdonald had expressed himself to a deputation which waited upon him, as strongly in favour of taking decisive steps in the near future to establish a bureau of Vital Statistics and to create a department devoted to Public Health, as soon as the census-taking was completed, if not before. In corroboration of this intention on the part of the Premier, I also read a communication received by Dr. Grant, which I had been requested to read, from Sir Alexander Campbell, to the following effect:—Under date of May 27th, 1881, he wrote: "I have had several communications with Sir John Macdonald on the subject of Vital Statistics, the necessity for obtaining which, you and your colleagues, being a deputation from your profession, have several times brought under his notice. It has been Sir John's wish to give the objects aimed at by you his attention (he cordially concurred in the expediency of their being carried into execution) but the state of his health has been so precarious that he was unable to bring the matter into shape before he left for England. He desired me to communicate with you on the subject in order that you might take the proper occasion to inform your colleagues how

much he regretted his having been obliged to postpone action which he lays great stress upon. I hope that you and your colleagues will bear with the inevitable disappointment attending the postponement of action on your philanthropic suggestions with all the more patience, since I am confident that, had Sir John's health been more certain, he would, ere this, have given practical effect to them." The illness which then prostrated Sir John and caused an enforced absence from his arduous and responsible duties at the capital, was a matter of deep concern, to all Canadians, and to none more than to the members of this Association.

About the beginning of December of last year I addressed to Sir John the following communication:—It is my duty on behalf of the Canada Medical Association to address you again with regard to the matter of Vital Statistics and Sanitary Legislation. At the meeting of the Association at Halifax in September last a committee was appointed "to seek from the Dominion Government improved legislation in respect to Sanitation and Vital Statistics." As chairman of that committee I beg to submit for your consideration that the Canada Medical Association has year after year, for some ten years, passed a resolution asking the Government to take some step with the object of promoting the Public Health, and of preserving lives to the state, similar to what has been done in Great Britain, the United States and other nations, with the most gratifying results.

During last session, as you will doubtless remember, a deputation of senators and members with the committee, waited upon you to express our wishes regarding the question when you not only kindly listened to what we had to say, but expressed your desire and intention to meet, at least to some extent, the views of the medical profession of Canada, as represented by so large and influential a deputation. But unfortunately your severe and protracted illness rendered it impossible for you to do anything toward carrying out your intentions in the matter. We know that it was a cause of regret to you that nothing could be immediately done, from the letter Sir Alexander Campbell wrote at your request, on the eve of your departure for Europe, to Dr. Grant. That letter conveyed to the Canada Medical Association your regrets, your wishes, and your intentions in the future. As Dr. Grant was unable to attend

our meeting, Sir Alexander's letter was transmitted to me to form part of the report I had to present.

I have delayed up to the present addressing you knowing that very much would demand your time and attention after so long an absence from Ottawa. But as the time approaches for the assembling of Parliament it seems necessary to call your attention to the matter. And I do so with the hope that in the present prosperous condition of the Dominion there will be no obstacle in the way of placing in the estimates a suitable sum to make a commencement in the work of collecting and utilizing Vital Statistics, and in educating the public in matters pertaining to Public Health whereby a great saving to the country could be effected in life and producing power, etc. To this communication the following reply was received:—"I have your letter of the seventh inst. on the subject of Vital Statistics and Sanitary Legislation. I shall call the attention of the Minister of Agriculture to this matter without delay and take up the subject.

(Signed,) Yours faithfully,

J. A. MACDONALD.

On the twelfth of January I wrote to each of my colleagues on the Committee that as it was quite out of the question for the Committee to meet and to confer together, I would ask them to kindly furnish me with their views in relation to the matter, that they might form part of a communication I proposed to submit to the Government upon the subject. To this request I was kindly favoured with replies from Drs. Hill and Grant of Ottawa, Hon. Dr. Parker of Halifax, Dr. Botsford of St. John, Dr. Atherton, of Fredericton, Dr. Macdonald, Londonderry, Dr. Fenwick, our President, Dr. Larocque, Health Officer of Montreal, Dr. Orton, M.P., and Dr. Oldright.

On the 21st of January, after consulting with Dr. Oldright, I wrote to the Hon. Mr. Mowat, Premier of the Ontario Government, asking the favour of an interview with the object of explaining certain proposed combined action of the several Provincial Governments with the Dominion Government, and of showing the draft of a bill which the Nova Scotia Government had recommended and which would secure the object aimed at. A prompt and courteous reply invited the Committee to meet him on the following day. Shortly after

this a further communication was made to Sir J. A. Macdonald stating that it was with no ordinary satisfaction his letter had been received, informing me that he would call the attention of the Minister of Agriculture to the matter and take up the subject without delay. I then begged to submit for his consideration the statements communicated to me by the several members of this Committee, of which the following are extracts:—The Hon. Dr. Parker said: "I believe it to be the duty of the General Government to promptly deal with the subject of Public Health and Vital Statistics, but inasmuch as under the British North America Act it will be necessary for the Local Government to legislate in reference to many of the points connected with the subject of Sanitation, there should be consultation and co-operation on the part of those composing the different Governments, ere either the Central or Provincial Legislatures enter upon the matter actually and practically. I understand that your Government of Ontario are likely to legislate on Public Health this session. This is a step in the right direction, but it is not sufficient. The General Government should be urged by the Committee of the Medical Association as well as by the Local Governments to assist the Provinces by money appropriations, and as the subject of "Statistics," is relegated by the B. N. A. Act to the Dominion Legislature, the expense of that very important part of the contemplated system should be borne I think entirely by the Dominion. When Nova Scotia went into Confederation in 1867, we had a pretty well organized Department of Vital Statistics which was carried along for some years by the Dominion Government, but eventually the officers were pensioned and the departments abolished."

Dr. Botsford of St. John's says:—"As to the necessity of our Dominion taking its stand among the civilized powers of the earth, I have long felt it, and if I mistake, not the question of Hygiene will in the North-West be a grand necessity in the respect of proper drainage if nothing else. The question is assuming larger proportions as our country grows, and to have the subject in force now will probably be a large saving in the long run as we know that experience is always costly and if vital statistics in all its ramifications were acted upon at once the cost of experience will be so much the less. I very much fear that it will be

dire necessity only that will compel Government to action."

The following are extracts from the communication of Dr. Larocque:—"My views concerning public health are, that every Province should endeavour to establish a Provincial Board of Health, and also Municipal Boards of Health. We should at the same time aim at a uniform system of vital statistics, with a Central Board at Ottawa. We have provided for that matter in our Provincial Bill. The 11th clause says that the Provincial Board of Health shall consult with the proper officials at Ottawa, in order to have their approbation in the preparation of the various blank forms to be used for statistical purposes in the Province.

If the Provinces of Ontario, Quebec, New Brunswick, and Nova Scotia, would unite in a scheme of this kind, there would not be, I think, any difficulty in getting the Federal Government to allow each of these Provinces a certain sum of money for statistical purposes. If there was an understanding between the four Provinces it could, perhaps, be arranged to have a convention in Montreal as being the most central place. When you have examined our public health bill, be good enough to let me have your opinion on the scheme. I think it is very proper that you should send a communication to the Government. But I fear that no action will be taken unless very great pressure is used."

Dr. Orton, M. P., wrote as follows:—"As I mentioned to you last winter, my idea in reference to what would form the most effective system of collecting vital statistics and establishing a comprehensive system of public hygiene, is briefly as follows, *i. e.*, the appointment in every constituency, or county, or electoral division, of one medical man as a Dominion Health Officer at a nominal salary, say \$50 or \$100 per year, his duty being to collect from clerks of municipalities and the medical men in his district, all the vital statistics as well as suggestions as to the hygienic requirements of the various parts of his district. This to be embodied in a report to be forwarded once, twice, or four times a year, as thought proper, to Ottawa. The co-operation of the several Legislatures is important. The Municipal Act could be so amended as to make it compulsory on assessors to fill up a complete schedule

of vital statistics, which, obtained once a year, would be most valuable. A bureau of vital statistics and public health at Ottawa, with a deputy head at a moderate salary, say, \$3,000 per annum, to make a careful synopsis of reports from Medical or Health Officers, with the aid of a certain number of clerks, say eight, at a cost of, say \$600, some of course more, but others less, making a total cost for clerks of \$5,000 (nity) \$50 a year say, for each health officer in 210 constituencies, (it being more an honorable than a profitable position), total \$10,500. Printing, say, \$15,000, as the report from bureaus should be widely distributed, one at least to the head of each Municipality and Health Officer. The total cost of collecting vital statistics and establishing bureaus, etc., would not exceed \$35,000. This would be ample, and secure much valuable information, and be the means of saving so many, as well as in other ways aiding our country, as to make it the most profitable expenditure in the public interest that could be made. I shall be glad to assist you at any time, or wait with you upon Government, either before or during session, as may be determined best."

Dr. Atherton in reply, wrote: "I suppose we must take the Legislative Acts of other countries and be guided mainly by them. I am myself perfectly willing to entrust the matter entirely to your judgment, and I only hope you may succeed in your endeavors."

Dr. Grant said: "A few weeks ago I saw Sir John Macdonald with Dr. Fenwick, of Montreal, at which time we urged strongly that the subject should be taken into consideration the coming session of Parliament. Sir John made no specific promise, but advised us to secure the various documents of the Health Department at Washington, as a guide for future action. I am now of opinion that you, as chairman of the committee, should forward a strong and vigorous memorial from Toronto, calling on the Dominion Government to take action in the matter of public health; this document to be signed by the profession of Toronto. Forward the paper to Dr. Hill or myself, and we will have it signed here also and placed in the hands of '*The Secretary of State*,' without delay."

The most of the foregoing extracts were embodied in the communication to the Premier. I also

stated that "the Medical Society of Nova Scotia, in consultation with the Government of that Province, had given the question the fullest attention, and embodied their views in a bill, a copy of which I have been informed was transmitted to the Dominion Government, and that I thought the provisions of this bill would in the main be acceptable to the profession of Canada. I also stated that, having had an interview with the Hon. Mr. Mowat, and the Provincial Secretary, the Hon. Mr. Hardy, with whom this bill had been discussed, I had reason to believe that the Ontario Government would be willing to adopt some such measure. That the letters from Dr. Larocque showed that the Province of Quebec was fully alive to the pressing requirements of the people as to Sanitation and Vital Statistics.

"The elaborate scheme proposed by Dr. Orton was one which I thought would prove very acceptable and beneficial. I concluded by saying that my communication was somewhat lengthy, but, knowing the strong views held by the medical profession at large, and, imbued with the spirit of the resolution adopted by this Association, I felt it was my obvious duty to lay the matter as fully as possible before the Government, especially as he (Sir John) had already expressed his desire to meet the wishes of the profession in relation to the subject." A reply to this letter informed me that it had been referred to the Department of Agriculture.

The recommendation of Dr. Grant with regard to a memorial was acted upon, and I prepared one, not only for Toronto and Ottawa; but also Hamilton, London and Kingston, with the intention of sending one likewise to other places. Dr. Mullin, of Hamilton, very kindly proffered his aid in procuring signatures to the memorial, or in any other possible way. Mr. William Saunders, of London, promptly and successfully gave me assistance, for which our thanks are due. But Dr. Sullivan, of Kingston, while gladly giving his own name, informed me with regret that he could not procure any more signatures in that city. The following is a copy of the memorial:—

"MEMORIAL OF THE MEDICAL PRACTITIONERS OF THE PROVINCE OF ONTARIO TO SIR J. A. MACDONALD, K.C.B., ETC."

"The undersigned beg leave respectfully to urge upon the attention of the Dominion Govern-

ment the pressing necessity of establishing a Bureau of Vital Statistics at Ottawa to secure proper returns from all parts of the Dominion, and of having a periodical bulletin issued therefrom, conveying information and instruction to the medical profession and general public, with the object of decreasing the rate of mortality, and preventing sickness, and thereby saving lives to the state, and obtaining a greater producing power of the citizens at large, such as has been obtained in other civilized countries."

Only one of these memorials was sent to the Department at Ottawa, that procured by Mr. Saunders, for the reason that it had been learned that the Minister of Finance had placed a sum in the estimates for the purpose of Health Statistics. So far the promise of Sir J. A. Macdonald had been carried out, and we could but wait until the close of the session to see what steps the Government proposed to take. The advent of the general elections doubtless prevented immediate action by the Department of Agriculture. It was, however, hoped and expected that before the present time the purposes of the Government would have been made known. After waiting some time, the following communication was sent to the Hon. Mr. Pope, Minister of Agriculture:—"The approaching meeting of the Canada Medical Association, imposes upon me, as chairman of a special committee, etc., the duty of respectfully soliciting information as to the steps about to be, or already taken by the Government in the matter. I may say that the Committee had intended to wait upon you and the Premier during the last session of Parliament, but, having learned that a certain sum had been placed in the estimates for Health Statistics it was deemed proper to wait until the scheme of the Government had been made public, especially as the views of the Committee had been previously very fully presented to Sir J. A. Macdonald and yourself. The announcement that the Electoral Districts of the Province had been formed into Health Districts has been received by the Profession with much satisfaction. Any further information which may be furnished by your Department to enable the Committee to present as full a report as possible to the Association will be gratefully received." A reply, dated 31st of July, stated that—"In the temporary absence of the Minister

no reply could at once be given, and that it would be submitted to him on his return." I was also asked to state the date of the meeting of this Association. This information was duly supplied.

From statements made to me by a member of Parliament, I thought it not improbable that your Committee might be called upon to offer an opinion as to the best mode of applying the \$10,000 granted by Parliament for Health Statistics. I consequently wrote to the members of the Committee, asking them to favor me with their opinion as to how the sum could be best expended in beginning the work we have in view, etc. In reply to the enquiry, Dr. Botsford wrote "The amount given for the purpose will not meet the requirements of the case. It would cover Monk's plan of getting statistics, but this would be of partial advantage only, so much would depend on volunteer work. It appears to me that an appropriation by the Government relieves them of the difficult details and throws upon the profession the onus without the power to carry the system into effective operation. At the same time something might be done, provided the Government will ensure the free passage by post of all the circulars and cards required. *

* * * I am fully persuaded that, to be efficient, it must be compulsory on certain persons or officers to make returns, and that it must be elaborate in detail, and provisions for expenses, and penalties for neglect. I know that it will require a good deal of thought and labor to meet the circumstances of the case. * * We are complicated in our Dominion relationship, and each Province has peculiarities of its own; but some general plan should be devised to cover the whole ground, and until that is done the vital statistics of our country must continue to be mere guess-work, and consequently unreliable. I do not think it advisable for the profession to accept even \$10,000 and undertake the work. It will relieve the Government of responsibility and fail in its results. I believe the matter must be pressed upon the Government until they feel and accept the position, and devise a scheme, etc."

Hon. Dr. Parker writes: "With such an insignificant amount as \$10,000 for the whole Dominion nothing practical can be accomplished. The absence of compulsory registration is a great drawback, and to my mind is essential to success. Pressure will have to be brought to bear upon the

Local Governments on this important matter. The pressure can be made most effective if the Governor-General and his Government could be induced to put themselves in official communication with the local authorities in relation to the matter. If Lord Lorne could be persuaded to take up this matter and make *personal effort* on behalf of the cause, I have little doubt that satisfactory results would follow," etc.

Dr. Macdonald at some length gave his views, and I regret space will not permit of a more extended extract. He says: "The simplest plan would perhaps be to appoint a medical man in each county who would obtain the statistics by circular from clergymen and doctors, and forward these with a report of the sanitary condition of his county to a Commissioner appointed for the Province, who, in his turn would, from the county returns be able to make a report of the sanitary condition of the *Province* to headquarters. The method adopted in England and Wales would be impracticable, first, for want of sufficient funds, and secondly, for want of compulsory registration of births and deaths."

Dr. Fenwick expresses himself in the same terms with respect to registration, and the difficulty of obtaining it, and thinks that the Government should furnish books and forms, and that returns should be made to the Department of Statistics at Ottawa, to be there tabulated and published from time to time.

Dr. Grant, in a valuable communication, remarks, that he is "pleased that even a small grant, \$10,000 for public health has been given, as such will open the way for future action in so important a department as that which guards the lives of the people. * * * The Dominion cannot afford to pass matters pertaining to health, lightly, in this era of progress. * * * It appears to me that for the first year the observations on sanitary matters might be confined to the cities and larger towns, except in any rural epidemic of importance, which from time to time should appear. A medical officer to be appointed for each city and town, and a weekly report to be forwarded to the Department at Ottawa. Such reports to be tabulated and circulated by the Department every two weeks, with general directions of a practical character arising out of the acquired information collected at the different points. Facts

and suggestions thus thrown out, will in time prove the basis of a more extended system of investigation as to the causes of disease and the arrest of the same, such as now adopted in Great Britain and the United States.

Dr. Oldright has replied, saying: "I consider the scheme which I think you said was originally proposed by Dr. Orton a good one." He then proceeds to say, "that the Board of Health for Ontario, of which he is chairman, is meeting with hearty response to requests for co-operation by correspondents, and the members of the profession are cheerfully volunteering to advance scientific investigation. I need hardly say that I shall be glad to co-operate heartily with you in such labors. I think that the subject of immigrant inspection ought to be attended to in the report."

In the early part of the summer I had the opportunity of discussing this question with Dr. Orton who was about to visit Ottawa. The result of our conversation was the united belief that in view of the limited sum set apart for the purpose the scheme which he, Dr. Orton, had proposed and presented to the Minister of Agriculture some two years previously, and which has been already given in this report, should be so modified as to meet the available sum, namely: The Provinces to be divided into districts on the basis of the electoral districts for the Dominion; an officer to be appointed for each. At first he should receive only a small sum until the utility of the work would so impress the Government and people that an adequate sum would be granted to permit of further remuneration. The reports of the several officers of the health districts to be sent direct to the Department at Ottawa to be dealt with by a competent chief officer aided by a secretary. The Department to issue a bulletin once a fortnight containing such information in a summarized form, as the reports furnished, with instructions and advice to the public suitable to the present sanitary state of the country. As it might be supposed that all correspondence and papers passing through the post would be free, it was thought that even with \$10,000 an important step could be taken in state medicine. Dr. Orton made it his business to give this scheme to Sir J. A. Macdonald while in Ottawa. The announcement in the *Canada Gazette* that the provinces of Ontario, Quebec, Nova Scotia, and New Brunswick had been divided into Health Districts, gives promise that very shortly this plan, or one not unlike it, will be adopted by the Department.

In conclusion allow me to give you an extract from a letter by the "President of Sanitary Con-

gresses," "late chief officer of the General Board of Health of Great Britain," which appears in a late issue of the United States *National Board of Health Bulletin*. He writes: "You will, I am sure, be pleased to be informed, from recent reports and statistical returns, that by rudimentary and yet very imperfect applications of sanitary principles, there has been effected in England and Wales during the last decade a saving of a quarter of a million lives, and of more than three million cases of sickness, and upwards of four millions of money; and I may add that within the same last decade, by somewhat advanced applications of sanitary science, there has been in the Indian army, in the Colonial army, and in the home army, a saving of nearly fifty thousand of men effected, and nearly nine millions of money saved from expensive sickness and death rates." He also states that, "on good authority, the death of the late Dean Stanley from erysipelas was occasioned" by sewer gas arising from bad drainage."

It will thus be seen that the authorities may, with economy, expend money in preserving the health and lives of the people. Would it not be much better to pay money in saving the lives of Canadians than in promoting immigration?

It is a matter of satisfaction that the Ontario Parliament has passed a Health Act; also that a comprehensive one is passed by the Quebec Legislature. But to make any system of public health fully useful for the whole of Canada, there requires a Dominion Board to act in connection with the Provincial Boards. It is to be hoped that the promise to create a Health Bureau at Ottawa will soon be carried out, and it is respectfully suggested that the Department of Agriculture would find the work of elaborating a system of Health Statistics much easier would they appoint a medical man, representing the Association, to give advice and help to develop a scheme suitable for the country within the limits of the amount at present devoted to the purpose.

Respectfully submitted,

WM. CANNIFF,

Chairman.

1st Sept., 1882.

CASES IN PRACTICE.*

BY R. A. ALEXANDER, M.D., GRIMSBY, ONT.

VENESECTIONS—FOR CONVULSIONS OCCURRING DURING SCARLATINAL DROPSY.

On the 21st September, 1879, C. P.—, a boy eight years old, was attacked by scarlet fever which ran a severe course, and was followed in the first week of January, 1880, by general dropsy. Hydragogue purgatives, vapor and hot air baths were

*Read before the Ontario Medical Association, June, 1882.

used. Urine diminished to one or two ounces in twenty-four hours. Had twitching in arms and legs. Leeches over kidneys, with subsequent application of cupping glasses, followed by warm poultices, did not relieve symptoms. Bled from arm to amount of four to six ounces. Rapid recovery from symptoms of convulsions, and urine secreted freely. A certain amount of ascites and albuminous urine continued for six months. He at the present date enjoys very good health.

II. A girl, twelve years of age, had a moderately severe attack of scarlet fever in December last. Two weeks after disappearance of rash, face and body began to swell. Urine scanty and smoky. Prescribed infus. digitalis. At end of four days patient much worse. Violent headache and unable to retain either food or medicine. Was given vapor baths and purgatives. Had a violent convulsion lasting half an hour, at the end of which she remained quite unconscious. In less than an hour another convulsion came on, and when I first saw her had lasted for an hour. Her face was livid, pupils contracted to a small point, frothing at mouth. Bled her from the arm to amount of eight ounces. The convulsions passed off. Was able to swallow a dose of chloral and potassium bromide. Slept four hours. Awoke quite sensible. Made a rapid recovery.

RÖTHELN OR GERMAN MEASLES.

In February, 1881, W— F—, aged about 35, after feeling slightly indisposed for a day or two, became covered with an eruption somewhat resembling measles, but without the peculiar odour of that disease. He remembered having had measles some years before. Conjunctivæ intensely congested; throat red and sore, but not swollen; temperature 101°; did not feel sick; would not remain in the house; went about his work the next day with the rash fully out; had no complications nor sequelæ.

This was the first case of an epidemic of Rötheln or German measles, which prevailed in this section during the following spring and summer. On the 15th of the same month I vaccinated a boy aged three years with non-humanized vaccine virus from an ivory point. On the 24th, at the height of the vaccinia, he had a convulsion and the same day his face and body became quickly and thickly covered with an elevated eruption somewhat like measles. The eruption consisted of elevated spots or patches, some round, some irregularly shaped, of a bright red colour. The colour, however, varies a great deal in different patients. The day after the convulsion he was able to be up and about the house, and apparently did not feel very sick. The disappearance of the rash was very gradual and it could be seen at the end of two weeks, whenever he became overheated from any cause. There was violent inflammation of an erysipelatous character

in the vaccinated arm, with intense induration around the pustules, in fact almost gangrene.

After these two cases the disease spread rapidly through the village, and we were not free from it until the ensuing autumn. This epidemic was marked by symptoms common to both measles and scarlet fever. The premonitory fever was short and seldom as high as 102° Fah., and was relieved by the coming out of the eruption. Neither measles nor scarlet fever was prevalent at the time. Many of the children whom I attended during this eruptive fever I had previously attended for measles and since for scarlet fever.

My reason for drawing attention to this epidemic is the fact, that in several instances facial erysipelas occurred as a *sequel* within a week after the disappearance of the rash. In five cases of young ladies between the ages of fourteen and thirty years, who, after the disappearance of the eruption and feeling very well and the weather being unusually fine, had gone out walking or driving, erysipelas of the face appeared immediately and was of a severe type. One young lady died suddenly on the eighth day. In every case the sequel occurred at the beginning of a menstrual period. Tinctura ferri mnr. was badly tolerated in the erysipelas. Quinine acted well.

TRACHELORRHAPHY.

BY T. K. HOLMES, M.D., CHATHAM, ONT.

Emmet's operation for the cure of laceration of the cervix uteri is on its trial before the medical profession at present, and it is desirable that its utility be correctly estimated. In the hope of eliciting a discussion of the subject I present this paper, and by omitting as far as possible all points discussed in gynecological works and which are either familiar to or within reach of every one, I hope to limit it to a very few pages. In my experience laceration is found in forty per cent. of all uterine affections and is seldom uncomplicated, usually co-existing with areolar hyperplasia, subinvolution, endo-cervicitis or some form of displacement.

The predisposing causes are:—1st. Rigidity of cervix. 2nd. An unhealthy state of cervical tissue. 3rd. Abnormal presentations. 4th. Disproportionate size of foetal head.

The proximate causes are:—1st. Violence of uterine contractions. 2nd. Maternal efforts at expulsion when the head is about to escape from the os. 3rd. Artificial delivery unskillfully performed.

The operation of the first-named exciting cause is often due to the injudicious administration of oxytocics, more particularly ergot. There are doubtless other causes but these are the chief ones. Lacerations may be divided into those that heal spontaneously and those that do not, and the latter

(Read before the Ontario Medical Association, June 1882.)

into those that can be cured by topical applications and those that can only be cured by trachelorrhaphy. Slight lacerations of recent origin get well quickly under the use of the hot douche, medicated tampons, local depletion, and stimulating applications of iodine, carbolic acid, etc. Nitrate of silver, if used at all, must be applied with the utmost caution as it is otherwise sure to produce contraction which may result in stenosis.

The gravity of the symptoms does not bear a direct relation to the extent of the laceration, but depends upon the condition of the whole organ, and of the pathological state of the torn parts. Subinvolution, metritis, follicular enlargement, and displacements augmenting the suffering while without any of these the sensitive state of the torn cervix is alone sufficient to greatly impair the health and render medicinal treatment useless. Having had his attention directed to the uterus as the organ diseased in a given case, and having on examination found a laceration, how is the physician to determine as to the advisability or necessity of an operation? This is an important question and requires considerable experience to answer it correctly. If the cervical tissue is soft and the laceration small with little or no eversion of the lips, and there is reason to believe the injury to be of recent origin, the case is one offering a good prospect of perfect cure by topical applications. On the other hand, if the laceration be extensive, the eversion marked or the tissue hard and of a cicatricial character an operation is imperative, because even if we succeed in accomplishing a healing of the raw granular-looking surface by other means, the eversion will not be cured and the hard, whitish cicatricial cervix will remain and give rise to symptoms of malnutrition and nervous disturbance almost or quite as serious as obtained before. Laceration generally permits eversion of the lips, and when it does, an accurate idea of its extent may be obtained by hooking a tenaculum into each of the everted lips, and drawing them together. When this is done the raw surface diminishes as the inversion is accomplished until it nearly or wholly disappears. Sometimes little or no eversion exists until upward pressure on the vaginal walls at the cervical attachment pulls the torn lips apart and discloses the characteristic raw surface. This can be accomplished by using a large Ferguson's speculum and pushing it well up so as to make the desired upward pressure on the vaginal walls. The same may be done by using a Sim's speculum. The various kinds of laceration are so fully described in works on the subject as to obviate the necessity of speaking of that part of the subject here.

Immediate operation, or that at the time of the injury I have not performed. Dr. Mundé, editor of the *American Journal of Obstetrics*, strongly recommends it, and judging from his results it is worthy of consideration and if union be secured

would doubtless lessen the chances of septicaemia, just as immediate closure of lacerated perineum does. If not sewed up immediately it is necessary for involution to be completed before operating. Pelvic cellulitis, or indeed acute inflammation of any of the pelvic organs, contra-indicates an operation and should be overcome before attempting one. In all cases operated on by me I have resorted to a preparatory treatment consisting of the hot douche, tampons saturated with glycerine and tannin, local depletion, and in cases complicated with displacement daily repositions by postural method, aided by gentle pressure per vaginam and maintained by small medicated dossils of cotton batting. The use of the hot douche immediately before operating renders hæmorrhage less troublesome. I have found the following the most convenient and satisfactory method of operating. The patient properly etherized is placed on a table of convenient height in the lithotomy position and before a clear but not dazzling light. One assistant administers ether while two others support the knees and feet keeping the thighs well flexed. One of these assistants also holds a Sim's speculum under the pubic arch, while the other, if necessary, uses the sponge.

The instruments required are a small vulsellum forceps, a long bistoury, scissors curved on the flat, sponge holders, needle forceps, wire twisting forceps, shield for limiting the twisting of the wires, two Emmet's needles threaded with silk and half-a-dozen No. 28 best silver sutures, sixteen inches long. Having with the left hand seized the posterior lip of the cervix with the vulsellum forceps so as to have the upper jaw occupy the part that is to form the restored cervical canal the operator steadies the uterus and with a long bistoury divides the tissue on each side of the upper jaw of the forceps, first on the posterior lip then on corresponding parts of the anterior lip leaving a strip nearly half an inch wide in the centre where the forceps hold untouched and which are being brought into apposition from the continuation of the cervical canal. The removal of the tissue can be performed with great facility with the bistoury and in much less time than can be done with scissors, besides the internal boundary of the denuded surface can be more easily and accurately made with the knife. Care must be taken to remove all cicatricial tissue. After bleeding has been stopped the wires are to be passed in the manner described by Emmet; the wires twisted and sheathed in a piece of rubber drainage tubing. Absolute rest in bed is necessary in some but not in all cases, the condition of the patient being the criterion. Union is often perfect in seven days, but as no harm results from the presence of the silver sutures they may be left in ten or twelve days if union be not complete before that time.

The following table gives a short statement of nine cases upon which I have operated:

No. of Case.	Name.	Age.	No. of Labors.	Duration of Laceration.	Form of Laceration.	COMPLICATIONS	LEADING SYMPTOMS.	Date of Operation.	RESULTS.
I.	Mrs. R. J.	25	2 One Abortion.	4 years.	Stellate.	Arcolar Hyperplasia.	Anæmia. Dyspepsia. Great Debility. Leucorrhœa.	January 27, 1880.	Good health.
II.	Mrs. I. T.	34	5 Two Abortions.	6 years.	Transverse.	None.	Menorrhagia. Excessive Anæmia.	January 28, 1880.	Steadily improved, and became pregnant in six months after operation. Was delivered at full term, and is now perfectly well.
III.	Mrs. A. K.	26	1	2 years.	Stellate. 3 Fissures.	None.	Debility. Leucorrhœa.	February 16, 1880.	Has remained well to date.
IV.	Mrs. M. R.	34	4 Three Abortions.	5 years.	Lateral.	Retroflexion.	Constipation. Inability to walk or work. Pain in lumbar region.	February 17, 1880.	Became pregnant, and was delivered without injury to cervix. Wears a retroversion pessary, and is much better.
V.	Mrs. J. S.	31	4 One Abortion.	4 years.	Lateral.	None.	Menorrhagia. Anæmia. Pain in lumbar region. Inability to walk far or do any work.	June 29, 1880.	Has recently been confined. Don't know results.
VI.	Mrs. J. F.	38	3	3 years.	Stellate.	Subinvolution. Prolapsus uteri. Cystocèle. Lacerated perineum	Anæmia. Difficulty in walking. Debility.	November 25, 1880.	Able to perform domestic duties pretty well. Not perfect recovery, but greatly improved.
VII.	Mrs. J. K.	33	4	5 years.	Lateral.	Retroversion.	Inability to work or walk. Hysteria.	December 15, 1881.	Is wearing a retroversion pessary. Not improving very fast. Is very hysterical.
VIII.	Mrs. J. A.	35	2	1½ years.	Lateral.	Retroflexion.	Inability to walk or stand longer than ten minutes. Anæmia. Dyspepsia. Debility.	May 1, 1882.	Two weeks after operation walked two miles without fatigue. Is greatly improved.
IX.	Miss B. S.	25	2	3 years.	Lateral.	None.	Great weakness and peculiar bronzed skin.	May 22, 1882.	Union perfect. Too soon to judge of permanent results.

Correspondence.

DISPOSAL OF SEWAGE.

To the Editor of the CANADA LANCET.

Sir,—In your last issue I notice an article on "Sewerage and Disposal of Sewage," which reminds me of an idea I saw carried out in Haddington, in East Lothian, Scotland, when I was there in 1869. How it has turned out as a commercial venture I do not know, but if you should desire any of the details Messrs. David and James Croal, Proprietors of the Haddingtonshire Courier, could, doubtless, from their files give you all information.

Haddingtonshire or East Lothian is, we may say, the garden of Scotland, and is cultivated to the highest degree of perfection, vast quantities of artificial manures, guano, etc., being used in addition to that produced on the farm, and so far as I remember I think leases forbade the sale of any straw. This being the case, and as the river Tyne (a small stream) was being polluted by the sewage from the town, led to the idea of building a large tank and having the sewers run into it, the supernatant fluid being carried away for top dressing, and the sediment being ploughed into the soil. In the event of a spurt it was then only that the overflow of the tank entered the river, and as a consequence it also would be swollen, and any deleterious matter was carried off with the current. One great mistake was made by sinking the tank close to the river and considerably below the level of its bed so that at first it filled up to the level of the surface water; that, however, I think was remedied.

In such a vast agricultural country as there is surrounding Toronto, would it be possible to build tanks in various situations where the fall is favourable, made after the principle of the lower tank of a gasometer, leading the sewage into these, and shipping the fluid portion to farmers for top dressing during the mild months, and unless the tank becomes overfilled take advantage of winter to remove the frozen sediment when it would cause no nuisance to residents nor risk to those employed in the work?

The practicability of the scheme is a question for engineers, and the question if the demand by farmers would prove remunerative is one for the

financier, but if such a vast quantity of manure could be utilized for the good of the farmer, and at his expense, and at the same time the desired end secured of keeping the bay pure, the suggestion might lead to a discussion whereby both ends might be achieved.

Your obedient servant,

JAMES SKIRVING.

TAVISTOCK, Sept. 16th, 1882.

APOMORPHIA AS AN EMETIC.

To the Editor of THE CANADA LANCET.

Sir,—As some of your readers may not be fully acquainted with the value of apomorphia as a safe and rapid emetic, I send you my experience in two cases. A man came to my office having swallowed his plate of false teeth, measuring $2\frac{1}{2}$ by $1\frac{1}{4}$ inches. It still remained in the œsophagus, but out of reach or sight, gradually working down in spite of the man's efforts to prevent it. I immediately injected hypodermically into the arm $\frac{1}{8}$ gr. of apomorphia which produced free emesis in six minutes, and also the removal of the plate.

I was called to a case of poisoning by morphine and although the woman was rapidly becoming insensible she would give no information about the size of the dose, and declined to take any antidote. I injected hypodermically $\frac{1}{8}$ of a grain of apomorphia which produced free emesis in eight minutes and the case gave little more trouble.

These cases may call the attention of the profession to a medicine which I believe is still but little used.

Yours truly

W. GEDDES STARK.

HAMILTON, Sep. 1st., 1882.

Reports of Societies.

CANADA MEDICAL ASSOCIATION.

The fifteenth annual meeting of the Canada Medical Association was held in Toronto on the 6th, 7th and 8th of September, under the presidency of Dr. G. E. Fenwick, Montreal.

Drs. D. H. Goodwille and Elsburg, of New York, Drs. Brodie and H. O. Walker, of Detroit, and Dr. Workman, of Toronto, ex-President, were invited to seats near the platform. Dr. Osler, of Montreal, Secretary of the Association, read the minutes of the last meeting, which were adopted.

On motion of Drs. Wright and Canniff, Dr. W. B. Carpenter, of London, England, the eminent physiologist, was elected an honorary member, and it was announced that he would address the meeting upon the subject of "Vital Statistics."

Dr. Fulton, the chairman of the Committee on Necrology, read a list of members of the profession who had gone to their last resting place since the previous meeting of the Association.

Dr. Graham, Toronto, read the report on the Practice of Medicine. He referred to the International Congress held last year, and to the publication of discoveries made by Koch, of Berlin, regarding tuberculosis, a disease which he attributed to the presence of bacteria. By inoculation with the bacilli of tubercle the disease was produced, and there was no doubt that the germs were a cause of the disease. He was of opinion that many cases were set down as typhoid fever which were really cases of tuberculosis. In adults the disease generally commenced in the lungs, the germs being inhaled by the breath. In children the germs seemed to enter the stomach with the food, and the disease was generally found to originate in the bowels.

Dr. Carpenter now entered the room and was greeted with applause. He was introduced to the meeting by Dr. Canniff. The president also informed him that he had been elected an honorary member, for which he thanked the Association. He then proceeded to speak on the subject of "Vital Statistics." He emphasized the advantages of a strictly uniform system of taking statistics, such as prevailed in Great Britain. In the tabulation of these statistics a most important part was taken by Dr. Farr, the most able assistant-registrar, and it might perhaps be in the knowledge of many of them that to Dr. Farr they owed a word which had had a most important effect on the public mind, as conveying a distinct conception of a class of diseases which physicians now isolated from all others, namely, the word "zymotic." But it was a very curious thing that in Sir John Pringle's work on "Diseases of the Army," which was about 140 years old, the same idea was most distinctly enunciated—namely, that disease germs of certain classes of disease introduced themselves into the blood, and produced a fermentation of the blood, which was the cause of a particular type of disease. Sir John Pringle gave further the

results of some observations which the speaker had always held to be of fundamental value, namely, the principle of the convertibility of certain forms of zymotic disease to other forms—diseases which they were accustomed to regard as of a different type. At the conclusion of the rebellion of 1745, in Scotland, the troops were shipped off in little brigs. Some of the men were suffering under the mild autumnal fever. The brigs knocked about for six weeks, during which the men were enclosed under hatches without ventilation. In consequence of the unsanitary conditions the fever changed by the process above referred to into a malignant typhus. They landed, and the disease spread among the villages in which the men located. Another instance had come under his observation of the malarious fever of the west coast of Africa, changing under similar conditions into yellow fever of a contagious character. Dr. McWilliam and others had reported similar cases of the same convertibility of these kinds of fever. He also referred to Sir Robert Christison's opinion in favor of the convertibility of zymotic diseases, and that typhus and typhoid could not always be distinguished, and said that Sydenham, one of the best observers, did not distinguish between scarlatina and measles. He also quoted Pasteur's opinion to the effect that the medium in which the germs were developed would have a most important effect on the germs themselves; that when germs which would produce ordinary malarious fever developed themselves in blood which was rendered unhealthy by bad ventilation or other causes, these germs would develop themselves in quite a different form, producing a different type of disease. A fact of great importance which the vital statistics of Dr. Farr brought out was, that the prevalence of non zymotic diseases was a tolerably uniform quantity all over the country, and that the occasional doubling or trebling of the death rate in certain localities was due solely to zymotic diseases. When their sanitary reformers got hold of this fact they were able to press the point upon the attention of the Government; but the great obstacle which they had to encounter, and which no doubt had to be encountered in Canada, was the want of public opinion. The speaker then referred to the subject of small-pox, in which he said he had always taken a deep interest. The small-pox epidemic which swept over

Europe and America in 1871, was of a most singular character, and called attention to a type of small-pox which had not been epidemic since the beginning of the last century. He believed that the revival of the severe form in 1871 was due to the crowding together of the French army in Paris, and of the French prisoners taken by the Germans, and that the malignant type was thus developed out of the milder form. The lesson they had to learn from all this was to insist upon vaccination. Good vaccination might be said to be an almost perfect preventive. Another fact which the older practitioners recognized was, that the quality of the vaccination had deteriorated during late years, and the only remedy for this was to obtain the vaccine fresh from the animal.

A vote of thanks was conveyed to Dr. Carpenter for his interesting address.

The following gentlemen were appointed a Nominating Committee:—Drs. McDonald, of Hamilton; Kennedy, of Toronto; Sweetland, of Ottawa; Rodger, of Montreal; Cameron, of Montreal; Robillard, of Montreal; Botsford, of St. John; H. P. Wright, of Ottawa; Harrison, of Selkirk; I. H. Cameron, of Toronto; Scott, of Montreal, and Sloane, of Blyth.

The meeting then adjourned to meet again at 5 p. m., for the purpose of organizing the Sections on Medicine and Surgery.

In the evening session the President read his address. After thanking the members for electing him to the office, he referred to the benefits received from the meetings of the Association. The programme before them was a wide one. It was an important matter to meet together and compare notes on matters relating to their profession. It was to be desired that the discussions should be thorough, and with this view it had been arranged that the Association should meet in sections. It was necessary that they should come to these meetings with minds open to conviction, as otherwise discussions would be useless. He referred to the influence which the British Medical Association possessed in the councils of the nation, and said they might look to that Association for an example of what the Canadian Association might be, and the important work within its scope. A great deal of the work of that Association was done by its branches, and he hoped to see the same plan adopted in Canada. He then traced

the history of the Medical Association, and gave it as his opinion that they might have been celebrating their jubilee, as the British Association was now doing, had it not been for the disagreement which at one time marked the proceedings of the Association and interrupted its existence. On taking up the subject of public health he quoted Lord Beaconsfield's reported remark that the first business of a Minister should be the health of the people, and he hoped similar words would be used by some Minister at Ottawa. They were so far without any system, but the Government was desirous of receiving suggestions, and had placed \$10,000 at the disposal of the Minister of Agriculture. He thought that the collection of the statistics should be governed by municipal regulations. At present it might be well to limit the collection to towns and cities where some provision was already made, as, for instance, boards of health or health officers. He would recommend that the committee appointed at the last meeting to confer with the Government on the subject be continued. (Applause.)

Dr. Field, of Barbadoes, and Dr. Lough, of Bermuda, were elected members by invitation.

MEDICAL SECTION.

This section met at 5 p. m., and elected Dr. McDonald, of Hamilton, Chairman, and Dr. Stewart, of Brucefield, Secretary.

Dr. Osler, of Montreal, read a paper on "Echinococcus disease in America." The introduction into the human system of the ova of the *tænia echinococcus* of the dog undoubtedly produced a disease of the most serious character. Cases occurred in Europe, Iceland and America. All the internal organs became disordered, and echinococcus cysts developed. These cysts were found in the liver, spleen and lungs. Altogether only nine cases had occurred to his knowledge in Canada, and he had collected 61 altogether on the Continent. The ingestion into the system of one of the ova of the *tænia echinococcus* would not be followed by the same results as would follow from the ingestion of the larvæ of *tænia solium* from uncooked or imperfectly cooked meaty pork. The ovum of the *tænia echinococcus* developed into a cyst in the liver, which produced a number of hydatids. The ovum of the *tænia solium* of meaty pork invariably developed into tap

worm. *Tænia echinococcus* were ingested into the human system in water contaminated by dogs.

Drs. Graham and Temple related cases of the disease which had come under their observation.

Dr. Osler said that the treatment adopted in Iceland and Australia was either tapping or incision, while some cases had been cured by spontaneous rupture.

At the evening session Dr. Macdonald, chairman of the section, delivered a brief address, and reviewed the work already done by the Association.

Dr. Cameron, of Montreal, read a paper on the subject of "Axis Traction," in which he showed the advantages and disadvantages of the straight forceps, the curved forceps, and Tarnier's curved forceps. The advantage of the straight forceps was that it did not interfere with the natural rotation of the head, but a great disadvantage was, that when the head was high up the instrument could not fail to come in contact with the coccyx. There was also the liability to slip and injure the perineum and soft parts. The curved forceps were less liable to slip, but the line of traction was not in the axis of the pelvis, and if the instrument was so adjusted as to bring the line of traction right, it would be sure to come in contact either with the symphysis pubis or coccyx. To combine the advantages of these two kinds of instruments and eliminate their disadvantages, Tarnier had invented his forceps which had the advantage of traction along the pelvic axis and at the same time permitting the natural rotation of the head. The objections urged against Tarnier's instrument was its clumsiness and cost, and the danger of injuring the internal cavity.

Dr. Holmes, of Chatham, said that he had been accustomed to use the forceps after the manner recommended by Dr. Albert Smith, of Philadelphia, both as a lever and tractor, directing the woman to avoid pressure and thereby avoid laceration.

Dr. Temple, of Toronto, thought Tarnier's forceps were complicated, and that much simpler ones were better.

Dr. Stewart, of Brucefield, thought that danger was to be apprehended from the excessive use of instruments.

Dr. Alloway, of Montreal, read a paper on "Abortions," which he did not think had been

properly handled in some of the leading treatises, such as Leishman's. The great danger arose from hemorrhage by dilatation of the os uteri. He alluded to the modes of treatment recommended by different authorities, and the difficulty of carrying out some of them. His own experience was in favor of the uterine scoop. He condemned the use of the placental forceps. He related a number of cases in which the uterine scoop had been successfully used, and described the manner of placing the patient and using the instrument.

Dr. Tye, of Chatham, said he really thought we were passing through the iron age in the matter of obstetrics. After seeing all the forceps and scoops, and other iron instruments, he really congratulated himself that he was not a woman. In his practice he relied chiefly on the instruments provided by nature, and he found them very suitable.

Dr. Campbell, of Seaforth, said he had heard Dr. Spence, of Edinburgh, who must be regarded as a high authority, express himself decidedly in favor of Tarnier's instrument.

Dr. Rodger, of Montreal, while he disapproved of undue multiplicity and complication of instruments, said the valuable assistance rendered by them could not be overlooked. He spoke in favor of the tampon and placental forceps in abortion. After their use, and twenty-four hours' plugging of the os, matters were found in a satisfactory condition.

The section then adjourned.

SURGICAL SECTION.

The surgical section met in the afternoon, and elected Dr. Grant, of Ottawa, chairman, and Dr. Ross, Jr., Toronto, secretary. Dr. Grant returned thanks, after which the section adjourned until the evening.

On resuming, Dr. Roddick, of Montreal, exhibited a patient who had suffered for many months from a painful spasmodic contraction of the muscles of one side of the neck. The man was obliged to hold his head between his hands constantly. Dr. Roddick divided the muscles, but with only temporary effect. He then applied the actual cautery frequently to the back of the neck, and the result has been most satisfactory, as the man is now perfectly well.

Dr. Major, of Montreal, read a paper on "Rest

and Tracheotomy in Laryngeal Affections." He advocated the importance of rest in all cases of disease of the larynx and throat, condemned the use of gargles, and gave reasons sufficiently conclusive. The diagnostic value in malignant disease of the presence of indurated glands under the anterior border of the middle third of the sterno-mastoid muscle was also alluded to. The indurated glands exist before ulceration takes place in the morbid growth. His experience extended over seven cases; in all, this condition was noticed, and on the same side as the malignant development. He had not found it in syphilitic, chancroid or other diseased states. He also recommended gold instead of silver canulas, as gold opposed the action of the secretions much better than silver, and was less irritating. He advocated rest in hysterical conditions, especially when any vitiated method of phonation or respiration had been acquired, and said that attempted phonation on inspiration was one at least of the causes of hysterical aphonia or dysphonia.

Dr. Ryerson, of Toronto, agreed with Dr. Major in his views, as also did Dr. Fenwick, more especially in relation to cancerous diseases, as it merely substantiated his experience of colotomy for cancerous disease of the rectum.

Dr. Elsberg, of New York, endorsed the views expressed by Dr. Major, and said that he deserved the thanks of the Association, for denouncing the old-time method of gargling. He had some years ago, his attention drawn to the fact that rest in cases of inflammation, applied to the throat as well as to any other part of the body. Under the influence of rest inflammatory conditions subsided. The larynx was moved in three functions, namely, in the production of voice, in breathing and in swallowing. The first was a voluntary action, and it was possible, therefore, to secure complete rest. Breathing, though absolutely necessary for life, might be made easier, and by tracheotomy the larynx might be relieved from active participation in respiration. Was it advisable to preform tracheotomy for this purpose? He did not share in the opinion that it was a simple or harmless operation, but he considered it was valuable in appropriate cases. With regard to the third function, swallowing, tracheotomy did not afford complete rest, but other means might be taken to give partial rest.

Dr. Hingston asked Dr. Elsberg and Dr. Major

to state in what cases they would or would not use tracheotomy? He also dissented from the view that tracheotomy could either retard or have any curative effect on malignant disease.

Dr. Elsberg said he would use it in all cases in which stenosis indicated it. With regard to the second point, he had not enunciated the opinion that it could cure but it might arrest for a time the progress of malignant disease.

Dr. Sutherland, of Montreal, exhibited fourteen specimens illustrating the terminations of aneurism, all of which were exceedingly interesting. Three of them showed nature's method of cure.

Dr. Sheppard, of Montreal, read an interesting paper on "Cervical Ribs," which occasioned some discussion.

Dr. Grant, chairman of the section, read a paper on "Cancer of the breast in its relation to Disease of the Nipples," which was listened to with great interest, and was discussed by Dr. Hingston, Dr. Fenwick, Dr. Ross, jr., and others.

The section then adjourned.

SECOND DAY'S PROCEEDINGS.

The general meeting was called to order by the president at 10 o'clock.

Dr. Shepherd, of Montreal, read the report of the Committee on Surgery. He first referred to the great advances made in the treatment of wounds, and said all surgeons were not antiseptic surgeons, and that Listerism was only a phase of antisepticism. He advocated the dry form of dressing wounds, and gave his own method of dressing wounds, with iodoform and boracic cotton. The theories as to the cause of inflammation were then touched upon, and an account given of Dr. Hamilton's experiments with sponge-grafting. He also alluded to the wonderful success of Dr. McEwen and Mr. McNamara in bone-grafting. He then remarked that no organ was considered sacred by the surgeon, and spoke of the wonderful success that had attended the operations of nephrotomy and nephrectomy. The treatment of club-foot was glanced at, and the opinion of the members asked as to the advisability of tenotomy. The report concluded with an account of the late improvements in the treatment of the joints, and the question of excising joints for joint disease discussed.

Dr. Grant, of Ottawa, referred to the valuable services of M. Pasteur in the field of surgery, and emphasized the importance of antisepticism in the treatment of disease.

Dr. Roddick, of Montreal, while expressing great admiration for Dr. Shepherd's report, disagreed with him as to the value of dry dressing. He also spoke strongly in favor of the antiseptic treatment.

Dr. Hingston, of Montreal, after complimenting Dr. Shepherd on his admirable report, said that antisepticism and Listerism were not convertible terms. There was no surgeon who was not in favor of antisepticism, by which he understood complete cleanliness in treating wounds. With regard to the treatment of club-foot, he was not in favor of the division of the *tendo-Achillis* at an early stage of the disease. In his mind the tendon was not at fault in a majority of cases, and should be the last to be divided.

Dr. Mackay, of Woodstock, had sometimes treated club-foot without dividing any tendons.

Dr. Sloane, of Blythe, spoke of the improvements made within the last few years in the treatment of wounds.

Dr. Workman wished to know whether any member present had any experience in dressing wounds with whiskey.

Dr. Ferguson, of Toronto, and Dr. Stewart, of Brucefield, also discussed the paper.

Dr. Harrison, of Selkirk, did not understand the separation of antisepticism from Listerism. He remarked that he was thankful that in the country places they had never discovered anything—(laughter)—as he found that discoveries very often underwent a course of indiscriminate praise, and afterwards undeserved abuse.

Dr. Canniff did not think the whole credit was due to Dr. Lister. M. Pasteur and Dr. Samson Gamgee, of Birmingham, had also rendered service of the highest order.

Dr. Campbell, of Seaforth, would like to have a definition of what Listerism really was, and asked the president to define it.

The president said that would be a very arduous task for him. His own practice was to cleanse wounds and then apply the spray. He considered the use of the spray advantageous, and meant to continue the use of it till something better was in-

troduced. Even with the use of antiseptics he had not found it possible to prevent suppuration. He was not convinced Dr. Gamgee's method of dry dressing was in any way superior to the moist.

Dr. Brodie said he had used very little carbolic acid in his practice, and did not know but he had been as successful as his brethren who had made use of it. One fact which he thought was a good deal lost sight of was the management of the patient before the operation.

Dr. Tye, of Thamesville, then read the report of the Committee on Therapeutics. He referred to the dangers resulting from hasty generalizations in therapeutics as well as in surgery. The power of medicines was merely to increase or diminish the functions of tissues and organs; they could not change the character of these functions. He dwelt on the use of electricity in cases of anæsthesia, asthenia, and suppressed menstruation, and also characterized the effects of different kinds of currents, such as the magneto-electric, the galvanic, and the frictional, when applied in the treatment of different kinds of disease. The therapeutic effect of certain newly-introduced drugs, such as nitro-glycerine, pilocarpin, salicylic acid, antiseptic inhalations, etc., was also referred to.

Dr. Canniff laid before the association a printed report of the committee appointed to seek from the Dominion Government improved legislation in respect to sanitation and vital statistics. (This report will be found in another column.)

The association then adjourned.

MEDICAL SECTION.

Dr. Harrison, of Selkirk, read a paper on "A Peculiar Form of Fever" which had come under his observation. He described the symptoms, progress and treatment adopted in these cases. Sometimes the fever was remittent, subsiding occasionally for a few days, and then recommencing. He had prescribed quinine, as in ordinary intermittent fever, but without any benefit. He then changed the treatment to iodine, maltopepsyn and carbolic acid. In two cases the patients had died in thirteen or fourteen weeks from pure exhaustion. In another case the patient had recovered after eight weeks. The peculiarity was the variation of the symptoms from one kind of fever to another, and the long duration of the disease.

Dr. Riddel thought these were cases of a kind of malarial fever, partaking of the nature of cerebro-spinal meningitis.

Dr. Ross, of Montreal, did not think that they were in a position to discuss these cases. There might have been suppuration of some internal organ, such as the kidney. This could only be ascertained by examination of the urine. It was not impossible that they might have been cases of ulcerative endocarditis.

Dr. Tye, of Chatham, stated that some time ago a large number of cases of the kind so graphically described by Dr. Harrison had come under his observation. Indeed it had been at one time almost epidemic, and was considered a form of cerebro-spinal fever.

Dr. Holmes, of Chatham, had had similar cases under his observation. He did not agree with Dr. Ross.

Dr. Mullin, of Hamilton, read a paper on "Diphtheria." There were, he said, various forms of the disease, and in some cases other ailments were set down as diphtheria. He described a case of diphtheritic croup that he had treated. He prescribed an emetic of ipecacuanha, followed by steaming. In a few days the symptoms became unfavorable. The patient was attacked with severe asphyxia, and tracheotomy was performed. An attack of ague supervened, but ultimately the patient recovered. The low forms of animal growth that invaded the fauces and tonsils in this disease were very tenacious of life. The bacteria and bacilli present should be destroyed if possible by cauterization or otherwise. Opinions differed as to the value of treatment in diphtheria. Some held that a certain proportion of cases would recover by the unaided *vis medicatrix naturæ*, while others would not recover under any treatment.

Dr. Holmes, of Chatham, read a paper on "Cholera Infantum." Among its causes, he said, were hot weather, damp atmosphere, defective nourishment, bad ventilation and drainage, unsuitable clothing and indigestible food, and to prevent the disease, such of these causes as were preventable should of course be removed. The treatment should aim at reducing the temperature and restoring the normal condition of the stools. To reduce the temperature sponging might be used or the evaporation of spirits on the body. The use of opiates, either for the purpose of relieving pain or

as astringents, should be carefully avoided. He recommended the use of castor oil and minute doses of mercury.

Dr. Macdonald, chairman, was glad that the disease was not now so virulent as formerly, and better modes of treatment were in vogue. He had often prescribed a long trip on the lake with success.

Dr. Ross, sr., had found the use of laxatives and sedatives advantageous.

Dr. Stewart gave an account of three cases of "Sciatica," and one of "Painful Stump," treated by "Stretching the Sciatic Nerve." In each case he had used antiseptic precautions. Ether should be given during the operation in preference to chloroform. The operation was a very successful one, 97 per cent of all cases being either cured or greatly relieved.

The paper was discussed by Drs. Ross and Workman.

Dr. Prevost, of Ottawa, read a paper on "Tumour of the Bones of the Skull." There was an aperture in the frontal and parietal bones. The skin covering the tumour was of normal colour. The intellect of the patient did not seem much affected. He was, however, drowsy and dull. He walked slowly and his memory seemed affected. He went to the hospital and soon fell into a state of indifference, which was after a time followed by coma and death. The autopsy of the case showed that the morbid products had originated in the bones of the skull. He also exhibited the morbid specimen.

Dr. Cameron exhibited a case of "Pseudo-Hypertrophic Muscular Paralysis." The treatment was the administration of iron, arsenic, and the application of galvanism. The boy showed the peculiarity of his movement in ascending stairs and also in rising off his back. The Dr. stated his views in regard to the pathology of the case, which were those of Charcot and Bristowe.

Dr. Temple said such cases were rare, and were found chiefly amongst boys of the age of the patient, and mentioned a case under his care, in a man 64 years of age.

Dr. Graham believed the pathology to be first a sclerosis, and secondly a change in the muscles.

Dr. Sheard gave it as his opinion that in such cases the lesion originated in the anterior horns of the spinal cord.

Dr. Black submitted notes of an autopsy of a

case of "Echinococcus Disease of the Lung." He also exhibited the morbid specimens, and narrated the history of the case, which lasted during a considerable time, resulting ultimately in death.

Dr. Osler said that the fatal result in this case was due to suppuration of the cyst, which was one of the chief dangers of the disease. The spleen had been the seat of a cyst, which had developed to the size of a child's head. The cyst in the liver was also of enormous size.

Dr. H. P. Wright, of Ottawa, read a paper on "Phantom Pregnancy." The tumour was situated on the left side and developed in such a way as to produce in the mind of the patient the idea of pregnancy. The movements of the tumour tended to confirm this idea as they so much resembled those of the living foetus. When chloroform was administered reduction was effected, thus proving what was suspected. The woman recovered.

Drs. Ross and Sloane discussed the subject.

Dr. Ellis read a paper on "The Chemical Composition of the Milk of Cows fed on Distillery Refuse." He had made an analysis of the milk of cows fed with different kinds of food. The mean of the solids in the milk of distillery cows was 14.64; of other cows 11.82. The amount of fat in distillery cows' milk was greater than in the milk of others, the minimum of the former being equal to the average of the latter. The caseine, sugar, and ash ingredients were much the same in both. The principal difference was the greater amount of fat in the milk of distillery cows. The distillery refuse when examined was found to consist of grain, with the sugar and saccharine matter removed. The fat and albumen remained, together with a small quantity of alcohol, as small as distillers can make it. He could not say whether the use of this food produced any morbid condition in cows.

Dr. Workman had heard that cows could not be kept on this kind of food without degeneration.

SURGICAL SECTION.

The section met at 2 p.m.

Dr. Gardner of Montreal read a very interesting paper on a "Rare Form of Uterine Tumor."

Dr. Hingston, of Montreal, read a paper on "Certain Obstructions of the Air Passages." He reported a case where a horn button had become lodged in the nostril, his attention being first called

to the boy for general nervous trouble, when he discovered the existence of the button, which he removed, followed by a speedy recovery. Another, where a lady had swallowed a false tooth with its setting. There was no distressing symptoms for a considerable time, when a cough set in. Inversion was first tried, without benefit. After becoming much worse, she consented to tracheotomy for its removal. The paper was discussed by Drs. Major, Harrison, Fulton, Wright, and Roddick.

Dr. Fulton read a paper on "Polypoid Fibroma of the Bladder," and exhibited a specimen of a case occurring in a child. Cystotomy, he said, was the only rational mode of treating these growths. A double-eyed catheter might be used with advantage in the case of small polypoid growths. The paper was discussed by Dr. Hingston and others.

Dr. Ryerson read a paper on "Polypus Nasi." He described the various modes of treatment, giving his opinion that removal with a "snare" was the best.

Dr. R. A. Reeve, of Toronto, read a paper on "Orbital Diseases," dwelling mainly on the importance of an early recognition of such affections and timely operations for their removal. Specimens of tumors removed and photographs of cases were exhibited.

Dr. Walker, of Detroit, read a paper on "Modern Lithotomy," describing several cases in which he had used Bigelow's instrument with success.

Dr. Ferguson, of Toronto, gave a report of three cases of "Eczema," which he had treated successfully by the internal administration of viola, and by the use of conium baths.

Dr. Cameron exhibited a woman suffering from an immense tumor, which covered her whole face.

Dr. Fenwick, of Montreal, made a few remarks on "Excision of the Knee Joint." In excision of the knee in children it was desirable to preserve the growing power of the limb. If the parts from which the bone grows could be preserved the operation could be performed in young children, with every prospect of a useful limb. He showed a specimen taken from a girl of 11 years, from whom he had removed the knee joint, and in which there was good bony union between the epiphyses of the bones. He had had in practice and hospital in all twenty-six cases. Of these twenty-two had recovered with useful limbs. Two had died: one from pyæmia, on the 18th day after the opera-

tion: the other at the end of eleven months from heart disease, following an attack of acute rheumatism.

Dr. D. H. Goodwillie, of New York city, read a paper on "The Operation for Closure of the Hard Palate and Hare Lip Immediately after Birth." He said that closure of the hard palate should be done before the child is two months old to avoid injuring the developing teeth, and the soft palate before the child begins to speak, at about two or three years of age. By the use of a wax model and diagrams the Dr. illustrated his procedure. The child is placed under an anæsthetic, and by means of a small revolving knife and the surgical engine a small V-shaped section was removed inside of the alveolar process of the intermaxillary, also running up into the septum a very little and at the same time the edges of the cleft of the hard palate are freshened by the revolving knife. Holes are also cut on either side of the hard palate for the purpose of passing suture-pin clamps to hold the maxillæ together. Just enough was taken away by the V-shaped section to allow the alveolus of the intermaxillary to resume its normal position. Now, by means of a forceps the maxillary bones are forced together so as to close the cleft of the hard palate. Then a nasal forceps is passed into the nostrils, grasping the septum, and the nose is drawn into perpendicular position, and at the same time the intermaxillary is forced into its normal place closing up the V-shaped section made by the revolving knife.

The alveolar ridge of the intermaxillary now meets with the maxillary of the opposite side. They are held together by the suture-pin clamps which he has devised for the purpose, made of steel and gold-plated.

The cleft in the lip is now closed, by first carefully applying the compression lip clamp on each side of the cleft lip, to prevent hemorrhage.

After the edges are pared, then carefully approximate both skin and mucous membrane, by passing the first suture in the vestibule of the nostril and ending with the vermillion border and then complete the operation by passing the suture pin clamps to take the strain off the sutures.

The advantages of this method are, viz.:

1. The cleft in the hard palate is closed in all cases where there is a normal amount of bone developed.

2. The alveolar ridge with the tooth germs are saved and brought into place, securing as near as possible the normal outline of the mouth and subsequent development of the teeth.

3. The nose is brought into normal position, and over-distended nostril restored.

4. The external normal appearance of the face is reclaimed.

A conversazione was given in the evening by the medical profession of Toronto to the members of the Association and ladies, at the Education Department, St. James' Square. The grounds were illuminated with Chinese lanterns, and the theatre, library, and other rooms of the building were brilliantly lighted and fitted up for the guests. The library was used as a reception room.

Shortly after assembling, the guests repaired to the theatre, where the chair was taken by Dr. Canniff. The chairman introduced Dr. Workman, who delivered a brief but hearty address of welcome, interspersed with that dry humour which always characterizes the doctor's utterances. Dr. Fenwick made a suitable reply.

Dr. Carpenter, who was present, was asked to make some remarks. He referred to the great progress of Canada, and the satisfaction with which that progress was regarded in England. During his visit he had met with nothing but feelings of attachment to the Mother Country. He also referred to their American brethren and the large number of distinguished men on the other side of the border. He had received the same welcome from Columbian as from his Canadian friends. Gatherings such as that now being held he regarded as of the greatest importance. During the past few days he had had conversations which had produced a great impression on him. He felt refreshed by the untrammelled state of existence enjoyed here, compared with London, from which he had come. He referred to the value and benefits of educational endowments, and eulogized the educational provisions of Canada. He had made himself acquainted with some of these establishments, such as the Toronto Science School, and spoke in high terms of them. He next referred to Emerson, who he found upheld the maxim, "Thought rules the world." Dr. Johnson said of Goldsmith, "*Nihil tetigit quod non ornavit.*" The same might be said of "thought." He assured

them he would leave Toronto with the liveliest feelings of gratification at their great progress and prosperity, and feelings of satisfaction with the intercourse he had had with his medical brethren and others.

The Misses Hillary, Miss Berryman, Mr. Pernet, Drs. W. W. and A. J. Geikie, and Mr. H. Creswell had volunteered their services for the musical programme. The guests now abandoned themselves to promenading through the museum and grounds, the band of the Tenth Royal Grenadiers meanwhile furnishing excellent music. Refreshments were served during the evening.

THIRD DAY'S PROCEEDINGS.

Dr. Worthington read a special report upon "Malaria," which formed part of the report of the Committee on Climatology and Public Health. It stated that the committee had sent out a series of questions to different medical men in various parts of the province, with the request that they be returned and answered, to serve as the foundation of a report on malarial poisoning. Thirty-seven circulars were sent to seventeen counties, and replies received from twelve medical men residing in ten different counties. In four of these no malaria was reported to have existed for many years, but in the remaining six it was said to be prevalent. In the malarial districts, the answer was that it prevailed to an unlimited extent, and was termed the curse of the country. In the districts referred to, the country around was reported to be flat, with sluggish streams whose beds and banks consisted of alluvium. The first effect of cultivation was to increase the evil, but it afterwards became the true remedy. Malarial poisoning seemed to be more active after the month of July until the cold weather. In the Lake Scugog district, malaria prevailed to such an extent as to cause the people to request the attention of the Government to the matter. The better draining of all low-lying land was suggested as a remedy, with the cultivation of the eucalyptus globulus, as practised in the marshy districts of the South.

The report was discussed by Drs. Ferguson, Riddell and Oldright.

Dr. Playter submitted the following resolution from the Sanitary Committee:—That for the present the collection of sanitary statistics shall be

confined to the cities and large towns of the Dominion, the results to be published monthly, and the deductions drawn therefrom to be circulated in the various centres specified. That a commission be appointed by the Dominion Government in order that by consultation and co-operation with the Local Governments a common basis may be arrived at for carrying out such sanitary measures as may be necessary for the guidance of the Dominion Government. The commission to consist of two or more medical men with a legal adviser.

The President said it was important that there should be a committee in communication with the Government on the subject, and he hoped that the subject of the report would be sent to the Government as the official report emanating from the Association.

Dr. Oldright said disease statistics would show when a certain disease was threatening a district. Death statistics often gave the information too late. He would regret any resolution of the kind recommended by the committee. In order to put restrictive regulations into force it would be necessary to get information at the time the disease was raging, and not when it was too late to be remedied. He moved in amendment that the statistics be not confined to the towns and cities.

Dr. Grant said that the Dominion Government had only granted \$10,000 for the whole of Canada, and it would be impossible to do more with that sum than was suggested by the committee. To pass the amendment would be to neutralize the whole action of the committee. They could do no better for the present than collect the statistics from the older towns and cities. The system could be subsequently extended if found to work well.

The original motion was carried by a vote of fourteen to two.

The Nominating Committee brought in a report recommending the election of the following officers for the ensuing year, which was adopted:

President.—Dr. J. A. Mullin, Hamilton; *Vice-Presidents*.—Dr. Tye, Chatham, Ont.; Dr. Gibson, Cowansville, Que.; Dr. Atherton, Fredericton, N.B.; Dr. Jennings, Halifax, N.S.; Dr. Kerr, Winnipeg, Man. *General Secretary*.—Dr. Osler, Montreal. *Treasurer*.—Dr. Robillard, Montreal. *Local Secretaries*.—Dr. Saunders, Kingston, Ont.; Dr. Brunelle, Montreal, Que.; Dr. Coleman, St.

John, N.B. ; Dr. Almon, Jr., Halifax, N.B. ; Dr. Whiteford, Winnipeg, Man.

Committees.—On Publication, Dr. Ross, Montreal ; Dr. I. H. Cameron, Dr. Fulton of Toronto, the general secretary and the treasurer. On Therapeutics—Chairman, Dr. H. P. Wright, Dr. Tye, Chatham, and Dr. Jas. Bell, Montreal. On Medicine—Chairman, Dr. Stewart, Brucefield, Dr. F. W. Campbell, Montreal, and Dr. Allison, St. John, N.B. On Surgery—Dr. Grasett, Toronto ; Dr. Brunelle, Montreal, and Dr. Atherton, Fredericton. On Obstetrics—Chairman, Dr. Kennedy, Montreal. On Necrology—Chairman, Dr. Fulton, Toronto ; Dr. Atherton, Fredericton ; Dr. La Chapelle, Montreal. On Climatology—Dr. Laroque, Montreal ; Dr. Botsford, St. John ; Dr. Worthington, Clinton ; Dr. Playter, Toronto. On Ethics—Drs. Gardner, Montreal ; Marsden, Quebec ; Bayard, St. John ; Parker, Halifax ; W. J. Almon, Halifax ; Steeves, St. John ; Beaudry, Montreal ; Chas. Moore, Sr., London. On Arrangements—Drs. Sullivan, Saunders, Fenwick, Metcalf, and Sweetland.

Kingston was selected as the next place of meeting on the first Wednesday of September 1883.

After the installation of the newly elected President, formal votes of thanks were tendered to the retiring President, the Mayor and Corporation of Toronto for the use of the Hall, to the Railway and Steamboat Companies, etc. etc., and the Association adjourned.

After adjournment, the members proceeded to the asylum, where they were most hospitably entertained by Dr. Clark, the medical superintendent.

During the session many of the members of the association visited the Hospital and were shown over it by Dr. O'Reilly, the medical superintendent. They expressed themselves as highly pleased with all the arrangements.

Several interesting exhibits of pharmaceutical preparations and surgical instruments were shown by different houses.

Messrs. Reed & Carnrick manufacturers of preparations of Maltine, and The New York Pharmaceutical Association, both represented by Mr. Gisborne, of Toronto, had a fine exhibit of medicines, and distributed samples of lactopeptine among the members of the Association. Messrs. Wyeth & Bro., of Philadelphia, showed an assortment of pharmaceutical preparations, compressed pills, and

fluid extracts. Mr. Hazen Morse, of Toronto, also had a fine display, and distributed samples of maltopepsyn. Messrs. Stevens & Son, of London England, exhibited some beautiful specimens of surgical instruments.

ONTARIO BOARD OF HEALTH.

SANITARY CONVENTION.

The first Sanitary Convention under the auspices of the Provincial Board of Health, convened in St. Thomas on the 19th ult. The following gentlemen were present :—Dr. W. C. Van Buskirk, Mayor and chairman of the local committee ; Dr. W. Oldright, chairman of the Board ; Drs. Yeomans and Cassidy, members of the the Board, and Dr. P. H. Bryce, Secretary ; Dr. Cascaden, M.P.P., Iona ; Judge Hughes, St. Thomas ; Dr. Ellis, Public Analyst ; Rev. Prof. Austin, Alma College ; Dr. Kains, sec. of the local committee ; Dr. Wilson, Dr. W. E. Smith, Mr. Coyne, St. Thomas ; Dr. McLarty ; Mr. Coatsworth, City Commissioner, Toronto.

Mayor Van Buskirk welcomed the members of the Convention to St. Thomas, on behalf of the citizens, expressing their appreciation of the determination to select St. Thomas as the place of meeting for the first Sanitary Convention in Ontario. He noted the immense field covered by sanitary measures, and felt convinced that it could not be gone over at a single convention. He recognized the wisdom of the Legislature in creating the Provincial Board of Health.

Judge Hughes, of St. Thomas, read a paper on the "Adulteration of Food," prefacing it with the remark, as a layman, that social science and sanitary reform do not belong to any one profession, and may be taken part in by many. He commented in severe language on the dishonest tradesman who bolted his doors against thieves, and then educated his clerk for the prison by instructing him in the adulteration of articles in stock. Educate young men into the mysteries of adulteration—milk watered, oatmeal ground with shorts, sugar glucosed, coffee made from clay or peas or chicory, tea poisoned, a loaf made under weight, calico sized and weighted with plaster—and you prepare matriculates for the penitentiary. The adulteration of tea was exhaustively treated upon, especially the facing of teas with coloring matter. He advocated

the appointment of a Sanitary Commission with power to investigate and remove the various evils complained of.

Dr. Ellis, concurred in the paper of Judge Hughes, and said that all green teas even the best qualities were faced with Prussian blue and china clay. He also alluded to the adulteration of milk.

Drs. Yeomans and Wilson also commented upon the paper.

A committee was appointed, consisting of Drs. Yeomans and McLarty, and Messrs. Coyne, Farley, and Casey, to report on desirable amendments to the Adulteration of Food Act. A committee was also appointed to inspect and report on sanitary apparatus, when the meeting adjourned.

At the evening session a letter was read from Dr. Carpenter, in which he emphasized the teaching of elementary physiology in every public school. He also referred to the removal and utilization of *excreta*, and recommended the separation of house drainage from surface drainage. He also recommended compulsory vaccination.

Dr. Oldright then delivered the inaugural address. This was followed by a paper on the "Impurities of Water" by Dr. Ellis, which was discussed by those present.

Dr. R. W. B. Smith, of Sparta read an interesting paper on "Contagion" which was well received.

Rev. Prof. Austin, of Alma College, read an able paper on "Public Schools and Public Health."

September 20th, 1882.

The committee did not meet this morning according to programme, but met at eight in the evening.

The committee on sanitary apparatus reported that the exhibition of sanitary apparatus did not come up to their expectations. A Toronto plumber was prevented through illness from sending apparatus for the exhibition.

Dr. Coventry, of Windsor, read a valuable paper on "Prevention of Controllable Diseases," such as cholera, yellow fever, typhus, typhoid, scarlet fever, diphtheria, measles, whooping cough. He strongly advocated quarantine and local supervision by boards of health, also compulsory vaccination, and expressed the hope that a minister of

Public Health would form a member of the Government.

On motion of Mr. McDougall the following motion passed:—"This Convention has heard with much gratification Dr. Coventry's account of the success which has attended the adoption in the town of Windsor of measures for arresting the spread of scarlet fever, diphtheria, and other contagious diseases, and would urge upon other municipalities the adoption of similar measures, such as, prompt isolation in their own houses, or in hospitals of the first named, and all cases of these diseases, which at present made such havoc among our people."

Dr. Vanbuskirk spoke on the "Disposal of Sewage," referring to three methods, viz., the cesspool, dry-earth closets, and water closets. He gave the latter the preference for thickly populated cities. Ventilating pipes fixed to the soil pipes outside would effectually ventilate the sewers.

Dr. Cassidy, of Toronto, read a paper on "The Heating and Ventilation of Buildings," after which the meeting adjourned.

Selected Articles.

UTERINE HEMOSTATICS.

By J. BRAXTON HICKS, M.D., F.R.S., Guy's Hospital, London.

As a small contribution to the practical portion of the subject of uterine hemostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to textbooks, we find it recommended that in case of threatened abortion with much hæmorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management there is much of distress to the patient in the use of the vaginal plug; and with regard to its hemostatic effect very much of uncertainty, and generally partial failure; and in the hands of the

unskilful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favors decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand; and although we may extemporize one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hæmorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hæmorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or larger; wind round this end, for about three inches down, strips of cambric rag, lint or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is

obtained. The strips of the other material can be laid on similarly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, or the end of a long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hæmorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape round the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we can not send home for a showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In cases of flexion with abortion (and it is this complication which so frequently increases the hæmorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful; for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.—*British Med. Journal.*

ON THE TREATMENT OF CONVULSIONS IN CHILDREN.

Eustace Smith, M.D., F.R.C.P. *London Lancet*, gives the following:

When called to a case of convulsions the practitioner should lose no time in questioning the attendants, but should have the child placed in a warm bath of the temperature of 90° F., and apply sponges dipped in cold water to his head. This is the time honored remedy. It is certainly an innocent one; it may tend to quiet the nervous system; and it is one the efficacy of which is so generally recognized among the public that it would be unwise to court unfavourable criticism by neglecting to employ it. The bath must not be continued too long. In ordinary cases the child should be allowed to remain in it for ten or fifteen minutes, according to his age. If, however, the patient be an infant who has lately been reduced by an exhausting diarrhea he should not be allowed to remain more than two or three minutes in the hot water, and cold applications to the head must be dispensed with. If the convulsions have ceased when the case is first seen the bath need not be

used; but we should not omit to have the child completely undressed, and then to see that he is placed, lightly covered, in a large cot, and that the room in which he lies is well ventilated and not too light. Care should be taken to unload the bowels by a large enema of soap and water, and if the child be noticed to retch, his stomach may be relieved by a teaspoonful of ipecacuanha wine. In the case of a teething infant, opinions differ as to the propriety of lancing the gums. There is no doubt that this operation is a useless one if employed with any hope of hastening the eruption of the teeth; but if the object be to relieve pain and tension I consider the practice judicious, and never hesitate in such circumstances to have recourse to it. If it be desirable to remove all sources of irritation, surely such a source of irritation as a swollen and inflamed gum should not be disregarded. Lastly, if it can be discovered that the child has had pain in the ear, or if the tympanic membrane can be seen to be red, the ear should be syringed out and fomented with hot water, and, if thought desirable, a leech may be applied within the concha, the meatus being first plugged with cotton wool.

If in spite of these measures the convulsions return, or signs are noticed of continued irritability of the nervous system, it is best to administer a dose of chloral. Two or three grains can be given to a child between six and twelve months old; and if the patient be unable to swallow, half as much again may be administered by the rectum dissolved in a few teaspoonfuls of water. If necessary, the dose can be repeated two or three times a day. Bromide of ammonium and belladonna are also largely employed in these cases. The former can be given in three or four grain doses every two hours to a child of from six to twelve months old; the second in ten or fifteen-drop doses two or three times a day to a child of the same age. Infants are so tolerant of this drug that it should be given to them in a dose which can produce some appreciable effect. In the convulsions of whooping-cough where the spasm of the glottis is extreme, treatment by bromide of ammonium or potassium is especially indicated. The bromides are well borne by quite young children, and we should not fear ill consequences from what may appear a very large dose. Chloroform is often employed, but it is decidedly inferior to chloral and much more troublesome.

If the child has been lately the subject of exhausting discharges warmth should be employed, and stimulants, such as the brandy and egg mixture of the British Pharmacopeia, be given energetically. If the convulsive attacks are followed by signs indicative of intracranial mischief, such as stupor, squinting, ptosis, etc., the child should be kept quiet and an ice-bag be applied to his head. In all such cases the treatment must be conducted

according to the condition from which the convulsion is supposed to have arisen.

When the convulsions have ceased, and signs of irritability of the nervous system are no longer to be observed, we must take steps to improve the general condition of the patient. His bowels should be attended to and his diet carefully regulated. If rickets be present it must be treated. Most children in whom the convulsive tendency exists are benefited by iron wine and cod-liver oil, for the nutrition is usually at fault, and both the alcohol and the iron contained in the wine are beneficial, while the oil is of the utmost value in supplying nutritive deficiencies. Fresh air, too, is of the utmost importance, and the child should be warmly dressed and be taken regularly out of doors.

CROSSED ACTION OF THE SPINAL CORD—ANOTHER CHANGE OF BASE.—The present generation of physicians have been taught to believe that owing to a decussation of fibres at the base of the brain, each hemisphere holds its relation to the opposite side of the body and not to its own side. But we are now required to modify our views on this subject, if not to throw them aside. According to the *London Lancet*, Dr. Brown-Séquard repudiates the old theory. The numerous researches he has undertaken during the last four years seem to him to involve conclusions exactly contrary to the opinions which are universally received. For example, against the assertion that the irritation of the motor region of the brain uniformly produces movements in the limbs on the opposite side, he opposes certain experiments of his own. These show that irritation of one side of the pons Varolii or of the medulla, even of the anterior pyramid, causes eight or nine times out of ten, movements of the limbs on the same side, and the same effect is observed when after a transverse division of one-half of the medulla, the superior part of the pons is stimulated, mechanically or by electricity, in the part considered as motor. Irritation of the cerebral peduncle in the part considered as motor often causes movements of the limbs on the same side. This result occurs five or six times in ten when the stimulation is applied to the upper part. If the fibres are galvanized which pass from the corona radiata or corpus striatum to the peduncle, movements are often observed on the corresponding side of the body. If these parts are divided transversely on the right side or on the left, the mechanical excitation thus produced rarely causes movement, but when it does the effect is usually manifested on the same side as the irritation. Even stimulation of the motor zone of the cortex, as Couty, has shown sometimes causes movements on the corresponding side. Moreover, Dr. Brown-Séquard has repeatedly shown that if this zone is galvanized after the lateral half of the medulla or

of the pons Varolii is divided, the movements in the opposite limbs, instead of being prevented by this section, occur with still greater force than before the division of these conductors which have believed to be alone capable of transmitting the stimulation of this zone to the limbs.

According to received doctrines, if one lateral half of the cervical cord is divided at the second pair of nerves and different parts of the brain are then stimulated, mechanically or electrically, on the same or on the opposite side to the spinal lesion, no movement should occur, or only a very slight movement in the members on the same side as the lesion. But Dr. Brown-Séquard finds that, under these circumstances, stimulation of the brain causes energetic movements of the limbs, such as "bipedal" movements, diagonal or lateral, to the right or left, or a movement of three, or even of four limbs. He concludes from this that one-half of the cord will suffice to transmit to the limbs, on both sides of the body, the excitation caused by stimulation of the opposite half of the brain.

According to received doctrines the transverse section of the two lateral halves of the base of the brain, the one section at a distance of one centimetre above or below the other, ought to destroy all or almost all communication between the spinal cord and the portions of the brain above the higher section, so that mechanical or chemical excitation of the cortex should cause no effect on the limbs. But Dr. Brown-Séquard asserts that under these circumstances not only does stimulation of the motor centres act energetically upon the limbs, but the same effect is produced by stimulation of the parts which are not considered to be motor, such as the optico-striate bodies. In this case, also, the effect is usually most marked on the same side as that stimulated. An analysis which Dr. Brown-Séquard has made of 500 cases of unilateral convulsions in consequence of varied lesions of the brain show that the same is true of man as of animals. Irritation of the base of the brain and the adjacent motor regions causes convulsions more frequently on the side irritated than on the other. The superficial parts of the brain, it is true, produce chiefly crossed convulsions, but irritation in all parts may cause convulsions on the same side.

The conclusions drawn by Dr. Brown-Séquard are, that one of the chief foundations for the theory of psycho-motor centres, and of the crossed functional relations between the hemispheres and the limbs must be considered to have lost its value; and, secondly that the excito-motor zone of the cerebral surface, and indeed all the excitable parts of the brain, are capable of putting in action the limbs of the same side, as well as those of the opposite side, and that they may produce these effects after the transverse division of one-half of the pons Varolii, of the medulla, or of the cervical

cord, and even after two sections of the base, one of the right half and the other of the left, provided a certain interval exists between the two.—*Pacific Medical Journal*.

DIAGNOSIS AND TREATMENT OF TUMORS OF THE BLADDER.—The case of successful removal of a tumor of the bladder reported by Sir Henry Thompson at the last meeting of the Royal Medical and Chirurgical Society will no doubt awaken fresh interest in this important subject. We will not here repeat the many points dwelt on in the subsequent discussion, but would refer to two only—the difficulty of diagnosis, and the safety of Sir Henry's operation. All the speakers touched upon the former, none questioned the latter. From the discussion and records of cases it seems evident that while there are few removable bladder tumors, and many unremovable ones, which can be reasonably diagnosed to be such during life, there is a large number of cases in which with only his present means, the surgeon must remain in doubt. All that is wanted in this case is to be able to *feel* the tumours. In the female, where the finger can be easily passed through the urethra, and the whole interior of the bladder explored, the diagnosis of these tumors can, we presume, always be made. Sir Henry Thompson will have done great service with his paper if it helps to draw attention to the ease and safety with which the male bladder can be thoroughly explored through a wound from the perineum into the membranous portion of the urethra. Such a wound does not interfere injuriously with the neck of the bladder, is easily made with precision, and heals readily. Every part of the viscus can be explored through it, without violence or risk, and medium sized tumors, at any rate, can be removed through it. Whether the median incision into the urethra be the best for removal of tumours in all cases we are not now anxious to show: its superiority over others for purposes of diagnosis we venture to think none would question, and we would recommend that in any case where a tumor of the bladder is reasonably suspected, and where other means of examination have not demonstrated that it is unsuitable for removal, the bladder should be explored by this safe and efficient means.—*Lancet*.

To be copied into the practitioner's note-book: Inhalation of five to ten drops of amyl nitrite will break up the chill of malarial fever; so will the hypodermic injection of one-sixth of a grain of muriate of pilocarpine. It is said that twenty drops of oil of turpentine will control the diarrhoea of typhoid fever. Two to five drops of wine of ipecacuanha three times a day will, in the majority of cases, check the vomiting of pregnancy.—*Independent Practitioner*.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, OCTOBER, 1882.

The LANCET has the largest circulation of any Medical Journal in Canada.

BRITISH MEDICAL ASSOCIATION.

The British Medical Association held its 50th annual or Jubilee meeting in Worcester, England, its birth-place, on the 8th of August and four following days, under the presidency of Dr. W. Strange, of Worcester. There was an attendance of seven hundred and fifty members present. The President in his opening address alluded to the founding of the Association in 1832, by Sir Charles Hastings, of Worcester, and a few devoted fellow-workers, and paid a suitable tribute to their memories. He also recalled to the memory of the Association the distinguished galaxy of names that marked that decade in medicine—Lawrence, Abernethy and Cooper, who were already passing away; Copeland, Latham, Marshall Hall, Brodie and Watson, in England; Barclay, Gregory, the Munroes, the Thompsons, Knox, Bell, Alison and Christison, in Scotland; Graves, Stokes, Colles and many others, in Ireland; on the Continent were Louis, Andral, Chomel, Magendie, Roux and Milne Edwards in France, whilst Rokitansky, Skoda, Liebig, and later, Virchow, were raising the German school out of its backward condition toward the pitch of eminence to which it has since attained. He next alluded to the establishment of the *Lancet* as the leading medical journal, and its agency in destroying monopolies, and redressing abuses within and without the profession. He then contrasted the condition of the profession at that time with that of physicians of the present day, and concluded an able address by urging the importance of strengthening the branches, and of

modifying the electoral system, so as to infuse new blood into the senate of the Association.

The address on medicine was delivered by Dr. W. F. Wade, of Birmingham. He referred to the therapeutical methods in use half a century ago, the chief characteristic of which was blood-letting and alluded to Marshall Hall's opposition to the practice, and his final triumph. He also showed how Hall's vivisection experiments were justified by their results, and defended Harvey's claim as the discoverer of the circulation of the blood. He next dilated upon the progressive nature of medical and therapeutical science, not only in the matter of new drugs, but also in our knowledge of how better to use old ones. In conclusion he cautioned his hearers against unduly subordinating the physiological to the restorative basis of treatment.

The address on surgery was delivered by William Stokes, F.R.C.S., Eng., of Dublin, in which he enumerated some of the chief advances in surgery during the last half century. The three to which he gave especial prominence were, 1. The discovery of anæsthesia. 2. The antiseptic treatment of wounds. 3. Subperiosteal surgery, and osteogenesis. He concluded a most eloquent address with a strong and earnest appeal in favor of vivisection. Prof. Stokes, who is a son of the celebrated Dr. Stokes of Dublin, proved himself to be a medical orator scarcely, if at all, inferior to Sir James Paget.

The association was divided into eight sections each of which was well attended. In the section on medicine the opening address, which was retrospective in character, was given by Dr. Clifford Allbutt, President, and was characterized chiefly by its excellence as a literary effort.

Dr. W. S. Playfair then opened a discussion on "The Systematic treatment of aggravated Hysteria and allied forms of neurasthenic diseases," in which he strongly recommended Dr. Weir-Mitchell's "massage" treatment in appropriate cases. There was considerable difference of opinion in the section as to the influence of uterine diseases in producing these conditions.

Dr. Austin Flint read a paper on "The Self-limited Duration of Pulmonary Disease," and mentioned several cases in which the disease subsided without any special treatment. Dr. C. T. Williams, of London, also read a paper on "The Contagion of Phthisis," which he held was incom-

patible with the theory of germs. Dr. A. J. Harrison read a paper on "Primary Endocarditis," in which he maintained its possibility of occurrence, and gave the history of four cases.

In the section on Surgery, Mr. J. Greig Smith opened the discussion on "Early operative treatment of joint disease as a preventive of excision." His plan was to scrape away diseased tissues, move the joint freely, and drain antiseptically. Mr. Prigden Teale said his plan of treatment was to make subcutaneous incisions into the capsule of the joint and allow the fluid to escape into the surrounding tissues to be absorbed. Martin's elastic bandage was recommended by some of the speakers to promote absorption of the effused fluid. The subject of litholapaxy received attention at the hands of Mr. Reginald Harrison, of Liverpool. He reported a case in which he removed a calculus weighing $2\frac{1}{2}$ ounces, and the patient recovered without any unpleasant symptoms. Mr. W. Adams read a paper on "Forcible Movements in Stiff Joints." Cases suitable for operation were those of traumatic origin in healthy constitutions, and those due to rheumatic inflammation; those due to strumons disease, and acute suppurative inflammation were unfavorable. He preferred the gradual to the violent method of breaking up the adhesions.

In the section on Obstetrics Dr. J. Williams read a paper on "Subinvolution of the Uterus," etc. Among the causes he mentioned general debility, post-partum hemorrhage, retention of portions of placenta, laceration of the perinæum, and pelvic inflammations. The treatment consisted in removing the cause, rest, and the use of warm (112° F.) disinfectant vaginal injections. Dr. Bantock of London read a paper on "Hysterectomy," and reported 21 cases in which he had removed the uterus for fibroids, with fifteen recoveries. The great danger after removal of the uterus was from hemorrhage and to prevent this he recommended a suitable clamp. He relies on absolute cleanliness and discards entirely, all antiseptic treatment.

The pathology of "Diabetes," and the "Changes which take place in the Great Sympathetic in Chronic Bright's Disease," were discussed in the Pathological Section and microscopical specimens of the latter here exhibited, showing degeneration of the nerve cells in the semilunar ganglia.

The annual report of the Council of the Association showed that the receipts for the past year were about \$50,000, and the number of members upwards of 9,560. The social side of the meeting was, as usual, very agreeable. Dinners, garden parties, excursions, especially the one to Stratford-on-Avon, were in order, and many of the members availed themselves of the customary hospitalities. Drs. W. T. Aikins and J. E. Graham, of Toronto, attended the meeting, and were elected members by invitation.

AMERICAN SCIENCE ASSOCIATION.

The meeting of the American Association for the advancement of Science, was held this year in Montreal, commencing on the 23rd and closing on the 30th of August, under the presidency of Dr. Dawson. The attendance was very large, nine hundred and fifty members having registered their names. Three hundred and thirty new members were elected, and no less than two hundred and fifty papers were received in the different sections. The meeting was in every sense of the term, a most successful gathering—one of the most successful meetings in the history of the Society. The President, in his opening address, alluded to his election to the presidency as evidence of the Society's expansion over the Continent, and its disregard of national boundary lines. The delegates were welcomed to the city of Montreal by Dr. Sterry Hunt, in an appropriate address. He also referred to the expansion of the Association, and expressed the hope that it might some day meet in the city of Mexico.

The business of the Association was conducted in nine sections, each of which was addressed by the respective president. Many interesting and valuable papers were read and discussed in the sections. Prof. Brush, the retiring President, read a paper on the "Progress of American Mineralogy." This paper which was a most interesting one, is published in the *Popular Science Monthly* for October. Dr. Asa Gray, the distinguished botanist, gave an interesting address on the "History of the Study of the North American Flora." Dr. John Rae, of London, England, read a paper on "Arctic Explorations and Ethnology." Rev. Dr. Houghton, of Dublin, also read a paper in which he advanced a "New Theory of the Evo-

lution of the Planets." Many other papers of equal merit and interest were read and discussed in the various sections.

Several distinguished men from abroad were present, among whom we may mention Prof. W. B. Carpenter, of London; Dr. Kovalevski, of Moscow; Dr. Koenig, of Paris; Mr. Fitzgerald, of Dublin, and D. Szabo, of Buda-Pesth, Hungary. The last named gentleman read a paper in the Chemical Section, and Dr. W. B. Carpenter one on "The Microscope," in the Microscopical Section. The social side of the meeting was all that could be desired, and reflected credit upon the well-known hospitality of the citizens of Montreal. In addition to the entertainments in the city there were excursions to Ottawa, Quebec and other places, which the members in considerable numbers availed themselves of. Prof. C. A. Young, of Princeton was elected President for the ensuing year, and Minneapolis, Minn., was chosen as the next place of meeting, in 1883.

We also learn that the members of the British Association for the Advancement of Science, purpose holding their meeting for 1884, in the city of Montreal. Should they do so, we can bespeak for them a cordial welcome, and the warmest hospitality of the city. In doing so we hope we may be pardoned if we call attention to the facilities afforded by the city of Toronto for meetings of the kind above alluded to. It is favorably situated, easy of access from all parts, only a short distance from Niagara Falls, one of the *eight* wonders of the world, and in the matter of hospitality not second to any other city in the Dominion of Canada.

CANADA MEDICAL ASSOCIATION.

The Canada Medical Association held its fifteenth annual meeting in Toronto, on the 5th, 6th and 7th ult., under the presidency of Dr. Fenwick, of Montreal. A comparatively full report of the proceedings will be found in another column. Owing to the number and variety of the papers, the meeting was divided into two sections—medical and surgical. The papers read were of more than ordinary interest, and occasioned considerable discussion. The continuance of the meeting into the third day was a new feature, and one to be commended. It is a mistake to endeavor to crowd the work of the Association into two days, as has hith-

erto been the case. Much valuable discussion is lost by reason of the haste to have all the papers read before adjourning. The presence of Dr. Carpenter and his interesting address on "Vital Statistics," was very gratifying to the Association, and we hope his remarks may have a beneficial effect upon our Governments in the way of inducing them to give a little more attention and support to matters pertaining to public health. During the intervals between the sessions, many of the members took occasion to visit some of the public institutions of the city, and were much pleased with their visits. In the evening of the second day the Association attended a *conversazione* at the Educational Department, given in their honor by the profession of Toronto, which was largely attended. At the close of the proceedings, the members who remained were invited to visit the Lunatic Asylum, where they were hospitably entertained by Dr. Clarke, the Medical Superintendent. The final decision of the Association to meet at Kingston next year was, we are constrained to believe, a good stroke of policy. Some of the members wished to have it meet in Montreal, but owing to a feeling, with which we have no sympathy whatever, that the Association is being manipulated by McGill professors and their friends, the majority deemed it wiser to meet in Kingston the ensuing year, and the motion was carried. Although the members of the profession in Kingston have hitherto held aloof from the Association, we have every reason to believe they will give it a hearty welcome, and endeavor to make the meeting a success in every sense.

Much credit is due to Dr. Osler, the able Secretary General, for the success of the recent meeting. In point of numbers and general interest, it was the most successful gathering in the history of the Association. We anticipate that under his skilful management the number of members will soon be doubled or even trebled—when it will have so outgrown its present proportions, that it can no longer be said to be under the wing of McGill or any other College.

ONTARIO COUNCIL MATRICULATION.

When the Ontario Medical Council a year or two since, adopted the High School Intermediate, with Latin, as its ordinary matriculation examina-

tion, it was hoped that no changes affecting the examination to any serious extent, were likely to be made. We were accordingly somewhat taken by surprise on learning a few months back, that certain modifications were in contemplation by the Minister of Education, and were likely to be carried out. During the last meeting of the Council several of its members interviewed some of the officials of the Education Office, and learned then, what has since been corroborated, that whatever changes might be brought about, were not likely to affect the examination required by the Council. After the adjournment of the Council the number of enquiries sent by intending medical students to the Registrar, regarding any changes which might be made, necessitated the issuing of a short circular, which was prepared after consultation with the Educational authorities under the direction of the President of the Council. It will be seen from this circular, which we give below, that the subjects included in the examination required, are precisely what they have been all along—and we learn on the highest authority, that the time-table of the Intermediate Examinations will be so arranged as to give every facility to those who take the examination as prescribed—different hours being assigned to the several compulsory subjects.

The following is the circular :—

“The Intermediate Examination referred to on page 10 of the Annual Announcement of the College of Physicians and Surgeons of Ontario for 1882-83; as the ‘Matriculation’ Examination, includes the following subjects, all of which are compulsory :—English Grammar; English Literature; Composition; Dictation; Arithmetic; Algebra and Euclid; History and Geography; Latin. By order, R. A. Pyne, Registrar.”

This does away with any difficulty, and allays all apprehensions, for it fixes the examination at exactly what the Council decided it should be, and lays down a standard for matriculation in medicine in Ontario, as high if not higher, than is required in any country in the world. The Medical Council has very good reason to be proud of the success which has thus far crowned its efforts to advance both the preliminary and professional education of Ontario students, who, wherever they go, take a high standing.

DR. JOHN N. REID.

It is our painful duty to announce the death at the early age of 52 years, of Dr. J. N. Reid, of Thornhill, Ont., of cancer of the tongue. Dr. Reid might be said to be one of the pioneers of the medical profession in his section of the country, having practiced in that locality for upwards of thirty years. He was a graduate of the College of Physicians and Surgeons of New York, and received the Provincial license in 1853. For thirteen years he was professor of physiology in the medical department of Victoria University, known as Rolph's School. He delivered three lectures per week, and was invariably punctual in his engagements with his class, although he had to journey a distance of twenty-four miles on each occasion. After the discontinuance of the medical department, he retired from college work and devoted himself entirely to his practice which was both large and lucrative. His death is greatly regretted by the community in which he labored, as he was much respected for his professional ability and fraternal disposition. He leaves a wife and family to mourn his untimely loss.

ARMY MEDICAL SERVICE.—In no campaign in which British arms have been engaged, have there been more complete and satisfactory arrangements for the care of the sick and wounded, than in the one now happily brought to a successful issue. An Army Hospital Corps of nine hundred men were in the field, distributed at various points where their services were required, and two large steamships, each capable of accommodating 250 patients, were fitted out as hospital ships. A competent surgeon, and staff of assistants and nurses were in charge of each ship. One purpose of the hospital ships was to serve as transports for the sick and wounded to general hospitals at Cyprus and Malta. All the medical officers attached to the staff were supplied with printed instructions in regard to the sanitary precautions necessary to the preservation of the health of the army. There are two diseases prevalent in Egypt to which the soldiers were exposed, viz., ophthalmia, and endemic hæmaturia. The former disease is produced by the scorching rays of the sun reflected from the hot sand, and the latter by drinking water, some of which

contains an organism (*Bilharzia hæmatobia*). The troops appear fortunately to have escaped both of these affections. At one time it was feared that a virulent epidemic would result from the frightful massacre which attended the bombardment of Alexandria, owing to the number of dead bodies, human and animal, that were rapidly decomposing in the hot sun; but a sanitary commission of local medical men, who realized the danger, undertook the work of removing the dead bodies, and burying them in trenches outside the city. The water supply was increased, the streets cleaned, and by prompt action the threatened danger was happily averted.

TREATMENT OF OPIUM HABITUÉS.—As there is no home for the treatment of the above-named class of patients in Canada, we take pleasure in calling attention to Dr. J. B. Mattison's institution in Brooklyn, N.Y. Dr. Mattison has had several years' experience in the treatment of opium habits, and has been very successful. His plan of treatment is to withdraw the opium in from five to ten days, avoiding the painful ordeal of immediate abandonment on the one hand, and the tiresome delay of prolonged decrease on the other. Tonics and nervines, together with cheerful social surroundings and personal professional attention, are the agencies used in the management of his patients.

NEW YORK POST-GRADUATE MEDICAL SCHOOL.—We take pleasure in calling attention to the inauguration of a post-graduate school of medicine in the City of New York. The members of the Faculty are all accomplished specialists in the departments respectively assigned them. The establishment of such an institution will be a boon to many medical practitioners by enabling them to acquire a further knowledge of any department of medicine which they may deem essential to their success in practice. We are glad to learn that the success of the new school is already assured.

UNCERTAINTY OF CATGUT LIGATURES.—In a case of Cæsarian section performed by Prof. Spaeth of Vienna, he sewed up the uterine wound with catgut ligatures—Lister's antiseptic chromic acid ligature. The patient died 48 hours after the operation, from peritonitis. At the autopsy the catgut

sutures in the uterus were found untied and straightened out, and the wound open and discharging lochia into the abdominal cavity.

INTERNATIONAL CONGRESS OF HYGIENE.—We have just received from Dr. C. W. Covernton, member of the Ontario Board of Health, a programme of the fourth International Congress of Hygiene, which met in Geneva, Switzerland, from the 4th to the 9th of September. Dr. Covernton was present as a delegate from the Ontario Board of Health.

BRANT COUNTY MEDICAL ASSOCIATION.—The regular quarterly meeting of the above Society took place on the 5th ult., at Paris. The following gentlemen were elected officers for the ensuing year: Dr. Wm. Clarke, (Paris) President; Dr. William T. Harris (Brantford) Vice-President; Dr. W. E. Winskel, (Brantford) Secretary-Treasurer.

MCGILL MEDICAL COLLEGE MONTREAL.—The Medical Faculty of McGill University will celebrate the 50th anniversary of the school by a conversation and dinner on the 4th and 5th inst. The Alumni and friends of the University have been invited and will no doubt respond in great numbers. A successful gathering and pleasant time may be anticipated. We sincerely wish the Faculty every success.

REMOVALS.—Dr. H. C. Burritt, member of the Ontario Medical Council for Newcastle and Trent, Dr. T. G. Holmes of Brussels, and Dr. Rutherford of Chatham have removed to Toronto. Before leaving for Toronto a number of Dr. Burritt's Peterboro' friends met at the residence of his father and presented him with a magnificent epergne, accompanied with an address.

DR. H. H. REEVE has left Minesing, and taken the practice of Dr. Lund, of Churchill, the latter having gone to Guelph.

We have received a letter from Dr. Burns anent the Council matriculation, too late to appear under the head of correspondence. The points raised in the Drs. letter are, however, fully answered in one of our leading articles.

PERSONAL.—Dr. A. Henderson, of Montreal, has returned from a trip to South America.

TO REMOVE THE TASTE OF QUININE.—Weak tartaric acid lemonade taken immediately after the quinine, will almost entirely remove the bitter taste which is complained of by many patients. According to the authority of Dr. Starke, (*Berlin Klin. Wochenschrift*), tartaric acid also favors the absorption of the quinine.

VOMITING DURING ANÆSTHESIA.—Dr. Keith says that he has seen less vomiting since he gave up the use of chloroform as an anæsthetic. With ether, patients will sometimes vomit during the operation; but we no longer have the vomit of chloroform, going on all the first night and next day after the operation.

HEREDITARY LINEAMENTS.—Dr. Oliver Wendell Holmes is credited with the following:—As he was waiting for a prescription, the druggist said: "That is my son, sir, sitting by you; don't you think he looks like me?" "Well, yes," replied the poet, "I think I can see some of your liniments in his face."

"What would you do, sir," asks *Punch*, "if you were called to see a man who had hung himself?" "I would cut him down." "Then what would you do?" "I would cut him up."

L.R.C.P. & S., EDIN.—Drs. Jas. Warburton, of Prince Edward Island, J. McBride, of Toronto, C. W. Belton, of London, passed their final examination and were admitted L.R.C.P. and L.R.C.S., Edin., in July and August last.

APPOINTMENTS.—Dr. Shultz has been appointed a Senator of the Dominion of Canada.

L. Teskey, M.D., M.R.C.S., Eng., has been appointed Assistant Demonstrator of Anatomy in Trinity Medical College, Toronto, and enters upon his duties on the first of October.

Dr. Bell, of Ottawa, has been appointed Surgeon of the Ottawa Field Battery, *vice* Dr. Bentley, who has removed to Winnipeg.

J. W. Oliver, M.D., has been appointed surgeon to the 44th "Norfolk" Battalion, *vice* Dr. F. C. Mewburn retired surgeon-major, and S. H. Glasgow, M.D., has been appointed assistant surgeon.

Dr. W. J. Christie, son of the Hon. Mr. Christie, of Brockville, who has recently been appointed surgeon of Her Majesty's sloop-of-war 'Bittern,' is now on duty with his ship at Alexandria.

Reports of Societies.

ONTARIO BRANCH MEDICAL ASSOCIATION.

A meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on Thursday, August 17th. Dr. Stewart, of Brucefield, presided. Thirty-two members were present.

After the usual preliminaries, Dr. Mackid, of Lucknow, shewed a case of scrofulous disease of the ankle-joint, which elicited a good deal of discussion as to which was conservative surgery in this case, to attempt to save the limb, or amputate in order to preserve the patient's life.

Dr. Yeomans, of Mount Forest, presented a very interesting, but rather obscure case of spinal disease. The patient is 58 years of age, previously healthy. A year ago last April he had an attack of pleuritis, followed by loss of power in the upper extremities; subsequently symptoms of paralysis occurred in the lower extremities. He cannot walk without crutches, cannot stand or walk with his eyes shut. His powers of co-ordination are at fault. No feeling of constriction around the body. He feels as if walking on a very rough or uneven surface. Patellar tendon-reflex present; no pain in spinal column. Any smooth article appears rough to the sense of touch in both hands. His habits of life have always been good. Electricity produces increased irritability.

Dr. Stewart, of Palmerston, shewed a case of infantile paralysis, having two separate lesions, the right arm and left leg being paralyzed. Also a case of neuromatous tumor of the ulnar nerve, accompanied by severe pain, no doubt resulting from injury to the nerve as a complication of a compound fracture of the humerus, which he had received.

Dr. Burgess, of Listowel, read a very instructive paper on "The pulse variations and their significance," which was well received.

Dr. Stewart, of Brucefield, reported a case of abdominal section for fibro-cystic tumor of the uterus, on which he operated on the 28th of June last. The patient was a young woman, 18 years of age. Tumor was first noticed three years ago. Abdominal incision was 10 inches long; pedicle divided in two parts, secured by carbolized silk and dropped back into the abdominal cavity. There were

no adhesions. A drainage tube was left at the lower part of the wound. Thorough antiseptic precautions (Listerism) were observed throughout. Had been mistaken for an ovarian tumor. Complete recovery. Tumor weighed twelve pounds, which was shown to the meeting.

Dr. Standish, of Palmerston, opened a discussion on the nature and treatment of diphtheria, in which the following gentlemen took part: Drs. Macdonald, Yeomans, Jones, McNaughton, Cowan, Gunn, Clapp, Philp, Bethune, Collinge and Halsted.

The following resolutions were passed:—That two meetings be held each year, instead of three as at present, each having three sessions. That the next meeting be held in Palmerston, on the first Tuesday of February next, and that Drs. Burgess and Graham prepare by-laws for the approval of the branch at next meeting.

The following gentlemen were appointed by the President to prepare papers for next meeting:—Drs. Gunn, Cowan, Macdonald and Holmes.

Books and Pamphlets.

A TREATISE ON THE PHYSIOLOGICAL AND THERAPEUTICAL ACTION OF SULPHATE OF QUININE. By Otis Frederiek Mason, M.D., Prof. of Physiology, etc., in the Medical College of Virginia. Philadelphia: J. B. Lippincott & Co.

This work though not large, is a most exhaustive one on the subject. The author states that although this remedy has been in use nearly two-thirds of a century, yet there is, perhaps, no agent concerning whose properties such opposite opinions are held, or which has elicited more discussion. He gives an interesting account of its discovery and first introduction into practice. He then gives in detail: 1st, its action on animals; 2nd, its action on man in health; and 3rd, its effects on the human organism and disease. This is followed by a chapter upon the therapeutic uses of quinine, and the author concludes with a short chapter on its *modus operandi*. Among the many diseases in which this remedy is used, he speaks very confidently of its great value in cholera infantum, and cerebro-spinal meningitis. His theory of its *modus operandi* may be summed up as follows, viz.: That it contributes to the removal of disease by rendering the nervous system insensible

to the action of the morbid causes of those maladies in which its employment has been proven by experience to be efficacious.

A MANUAL OF HYPODERMATIC MEDICATION; the treatment of diseases by the Hypodermatic method. By Roberts Bartholow, M.A., M.D., LL.D., Prof. of Materia Medica and Therapeutics in Jefferson Medical College. Fourth Ed. Philadelphia: J. B. Lippincott & Co. Toronto: Willing & Williamson.

In this work the author deals with the history of hypodermic medication, the method, the syringe, the solution, the remedies and their action, in short, everything in this connection that is likely to be of service to his readers. This little volume of 350 pages is the fourth edition, and has undergone careful revision by the author. Many changes have been made and considerable new matter has been added to the work. The author has ventured to substitute the term *hypodermatic* for the familiar word *hypodermic*. It will be found very difficult, we apprehend, to introduce the new term, the other having been so long in use. We cordially commend the work to our readers.

POCKET-BOOK OF MEDICINE AND PERPETUAL VISITING LIST. By D. Tod Gilliam, M.D., Columbus, Ohio.

This Visiting List comes as near perfection as any work of the kind we have yet seen. It comprises a compendium of diseases and their treatment, poisons and their antidotes, urinalysis, table of doses, many elegant prescriptions, etc. The call list is perpetual, and may be used at any time or for any year, either as a weekly or a monthly record, to suit the taste or convenience of the physician. The sheets of the call list are movable and may be replaced by new ones every week or month as required, or when posted into the ledger. The list is very compact, of most convenient size and handsomely bound in morocco. We heartily recommend it to our readers.

LABOR AMONG PRIMITIVE PEOPLE BY GEORGE J. ENGELMANN, A.M., M.D., Prof. of Obstetrics, Post-Graduate School of Missouri Medical College, Fifty-six Illustrations. St. Louis: J. H. Chambers & Co.

The author has devoted a good deal of time to the study of the obstetric customs among the primitive nations, and the work before us is the result of his *labor*. The subject is ethnological rather

than medical, but is nevertheless very interesting to a professional reader. The first part of the work is devoted to a description of the posture in labor; the second to the management of the third stage, and the third to the time of pregnancy, labor and childbed, and concludes with sketches of characteristic labor scenes among the yellow, black, and red races.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, by Louis A. Duhring, M.D., Prof. of Diseases of the Skin in the University of Pennsylvania. Third edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co.

We are pleased to announce the receipt of a new edition of this excellent work on diseases of the skin. The work has undergone careful revision. The chapter on the anatomy and physiology of the skin has been re-written and elaborated in accordance with recent studies in microscopic anatomy. Several new illustrations have been added, and the work as a whole has been considerably enlarged. The treatment of the various diseases has been brought up to the very latest improvements. We have very great pleasure in bearing our testimony to the value of the work as a text book on this interesting subject.

ESSENTIALS OF VACCINATION, by W. A. Hardaway, M.D., Prof. of Diseases of the skin in the Post-Graduate Faculty of the Missouri Medical College, St. Louis, Mo. Chicago: Jansen McClurg & Co. Price \$1.00.

This is a careful compilation of the more essential facts relating to this important subject, and as such will prove acceptable to the profession and also to the general reader. The author treats of the history of vaccination, nature of vaccinia, re-vaccination, the merits of different kinds of vaccine virus, methods of obtaining and storing it, and concludes with an examination of the objections to vaccination.

WHAT TO DO IN CASES OF POISONING by William Murrell, M.D., M.R.C.P., Lond., Lecturer on Materia Medica, &c., at the Westminster Hospital, second edition. Detroit: Geo. S. Davis, Medical Publisher.

The above will be found a most useful guide in an emergency. It is very small, and may be carried in the vest pocket and consulted without a moment's delay.

THE COMPEND OF ANATOMY FOR USE IN THE DISSECTING ROOM, AND IN PREPARING FOR EXAMINATIONS, by John B. Roberts, M.A., M.D., Philadelphia: C. C. Roberts & Co.

THE VEST-POCKET ANATOMIST, (founded upon Grey,) by C. Henri Leonard, M.A., M.D., Detroit, Mich. Eleventh revised edition. Price 75 cts.

The above works are similar in character and will be found useful as aids to the memory in dissecting, or on the eve of an examination—but should not be used in any way as text-books on the subject by the student.

INHALATION IN PHTHISIS.—A few drops of the following mixture placed upon the sponge of McKenzie's inhaler, and applied to the mouth and nose for several hours daily, will be found very serviceable in the treatment of this disease:—Acid carbol. ʒijss.; Tinc. Iodi, Ethereal, ʒiij.; Creasote ʒjss.; Spts. Vini, Rect. *ad* ʒj—M.

ABSENCE OF UMBILICAL CORD.—Dr. Kinne of Ypsilanti, Mich., reports in the *Detroit Clinic* a case occurring in his practice in which a woman gave birth to a six-month's foetus still-born. It was enclosed in a long and narrow amniotic sac to which the placenta was attached in a sessile manner.

"What is the action of disinfectants?" was asked of a medical student. "They smell so bad that people open the door and fresh air gets in," was the reply.

Births, Marriages and Deaths.

On the 18th ult., Dr. J. B. Bond, of Yarmouth, N.S., in the 80th year of his age.

In Halifax, N.S., on the 11th of June, B. Gardner, Page M.R.C.S., Eng., in the 72nd year of his age.

At Thornhill, Ont., on the 19th ult., of cancer of the tongue, Dr. J. N. Reid, aged 52 years.

At St. Benoit, Que., on the 25th ult., Hon. Dr. Dumouchel, aged 72 years.

In Galt, Ont., on the 23rd ult., Dr. Samuel Richardson, aged 74 years.

**.* The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

PLACENTA PRÆVIA, CHLOROFORM POISONING AND PEURPERAL SEPTICÆMIA.

BY G. H. COBURN, M.D., FREDERICTON, N. B.

Was called May 21st at 3 a.m., to see Mrs. E. P—. She had had sharp pains at intervals of fifteen minutes, for some hours, and quite a show of bright blood. Os uteri not dilated enough to admit the finger. Ordered rest in bed. No more pain nor hemorrhage until evening, when pains came on feebly for a few hours, accompanied by a slight show, os not dilating appreciably. All was now quiet until evening of 22nd, when pain and hemorrhage re-commenced. I was not informed of this, and she lost, through the night, 6 or 8 oz. of blood. On the morning of Tuesday, 23rd, I found os the size of a quarter dollar, a vortex presentation could be made out, and an edge of the placenta extending half way across the os uteri could be distinctly felt. The pains were not severe nor frequent, but with each a flow of blood occurred. I now separated the placenta from the uterus as far as my finger could reach, and ruptured the membranes, with the affect of increasing uterine contraction, and stopping the hemorrhage. Pains continued during the day, the os slowly dilating as it did so. I extended the separation of placenta and no blood was lost. At 11 p.m. the os was pretty well dilated, and as the patient was much exhausted and the *vis a tergo* poor, I decided to apply the forceps and deliver. Anæsthesia was produced by chloroform, and the towel given to an assistant. The first blade was adjusted without difficulty, but while applying the second the hemorrhage came on to an alarming extent. I supposed the instrument had separated the placenta, and, the patient being profoundly anæsthetized,

the uterus failing to contract, allowed the flow to come on. The forceps failing to lock readily, owing to the oblique position of the head, and the hemorrhage being profuse, I decided to deliver by version.

I introduced my hand into the uterine cavity, (I may here state that at no time had my hands touched the genital organs until they were soaked in a solution of carbolic acid), and reached the feet without difficulty. Some trouble was experienced in turning as the liquor amnii had been evacuated a long time. I had just brought the feet and legs into the vagina, the head not yet having reached the fundus, when chancing to look up, I, to my horror, saw that my patient was in extreme danger from the chloroform. Before I could reach her side, the breathing had stopped, and the pulse at the wrist was imperceptible. Artificial respiration was at once begun, and I injected hypodermically a syringe full of alcohol, neither whiskey nor brandy being at hand. For a short time I feared my efforts would be fruitless, but after two or three minutes perseverance and the aid of another injection, (of brandy this time), she gave a gasp or two, and respiration was established. Not caring to trust the anæsthetic to unskilled hands any longer, I sent for a friend who took charge of it, ether being substituted for chloroform. During this delay some blood had been lost, not very much, however. Upon examination I found that the feet had slipped up into the uterus again, necessitating the introduction of my hand. Version and delivery were now accomplished in a few moments. The child was not breathing, but a few smart slaps soon set it to crying lustily. Not wishing the patient to lose any more blood, ergot was given hypodermically, and in a few moments I delivered the placenta and got good contraction. Placenta and membranes were examined and found apparently intact. Ordered vaginal injections of carbolized water, 1 to 30, three times a day, and carbolized oil 1 to 10 on napkins. Some swelling of external organs followed, which subsided in twenty-four hours. Catheter used for two days. All went on well without an ache, pain or elevation of temperature until Saturday morning (fourth day,) when the temperature was found to be 102° F. Thought this might be due to the establishment of the lacteal secretion. On this evening there was a slight chilly sensation, but on Sunday morning

(fifth day,) the temperature was again normal, breasts full of milk, and patient felt well. At noon visit I was surprised to find the temperature 104.6° F. Examined napkins and found them smelling badly; no tenderness over uterus, and milk flowing freely. Thinking that the carbolic injections might not have been thoroughly used, I, myself, washed out the vagina. Prescribed quinine, ten grains to be taken daily in divided doses. At 9 p.m. I was gratified to find the temperature normal. Quinine was discontinued, temperature now kept below 99° F., and everything was in all respects normal until Thursday (9th day.) On this day I gave her permission to sit up for an hour in an easy chair beside the bed. She had not been up ten minutes when she was seized with an agonizing pain in the right utero-ovarian region. Brandy was given, and hot applications made. Upon my arrival I injected in the arm one-third gr. morphine and 1.120 gr. atropia. Pain was soon relieved, but much tenderness was left at lower right part of abdomen. Pulse 120, temperature 103° F. Hot applications continued and quinine recommenced, morphine to be used p. r. n. if pain returns. June 2nd, 9 a.m., pulse 100, temperature 101° F. Tenderness not so great; no morphine required during the night. 12 m., temperature 102° F.; much thirst and distaste for food, but no vomiting; tenderness decreasing, but feels a bearing down upon attempting to sit up in bed. There is evidently septicaemia, and more or less pelvic peritonitis. Quinine continued, and to have as much nourishing food as she will take. Lochia about stopped, but ordered carbolic injections to be kept up. 6 p.m., temperature 103° F. Prescribed two minims tinct. aconit. rad. every four hours. No diminution of lacteal secretion.

June 3rd, 9 a.m.—At one o'clock this morning she had a chill, followed by profuse perspiration, which continued several hours; pulse 96, temperature 99.5° F. Ordered two teaspoonfuls of brandy in milk every two hours; abdominal tenderness nearly gone. 12.30 p.m., temperature 99° F., pulse 90. Takes a fair amount of nourishment, but does not crave it. Aconite not to be given so frequently; pulse 88, temperature 98.5° F.; feels better. Had a bowl of chicken broth for dinner, also a few strawberries. 8 p.m., pulse 95, temperature 100° F. Feels quite comfortable;

food tastes natural again, and tenderness only felt on deep pressure. Gave a dose of aconite. 10 p.m., pulse 90, temperature 101° F. Had a good stool after enema; no pain nor chills; to have aconite at 11.30 p.m.

4th—9.30 a.m.—Feels much better this morning, and looks brighter; pulse 85, full and strong; temperature 100° F. Did not sleep very much, but was not restless; no soreness nor pain. Nurse said, that in washing out the vagina this morning a shred of membrane about an inch long, came away. Gave a dose of aconite. 1.30 p.m.—Pulse 90, temperature 101.5° F.; has had quite a sleep. A little bloody discharge came on to-day, smelling perfectly sweet. Gave a dose of aconite, and ordered another at 6 p.m. 8 p.m.—Pulse 90, temperature 102° F. Still patient said she did not feel very uncomfortable. Aconite to be given at 10 p.m.; quinine and brandy as usual.

5th—9.30 a.m.—Did not rest very well; felt very hot about midnight, and perspired freely after it; was hungry for breakfast and enjoyed it; milk flowing in abundance; legs ache badly; pulse 80, temperature 100° F. As pulse was down, and not full, I discontinued aconite for the present. A slight discharge continues, which smells sweet; no soreness nor pain; vaginal injections now to be used twice a day; food relished, and a fair quantity taken. 2 p.m.—Has had a good sleep and feels well, but pulse and temperature still keep up, the former being 100 and the latter 102° F. As all along the range of temperature had been higher than the symptoms would indicate, I had my thermometer compared, and found it to be correct. Her strength keeps up wonderfully. Ordered a dose of aconite mixture. 7 p.m.—Pulse 92, temperature 102° F. Gave aconite. 9 p.m.—Pulse 88, temperature dropped to 100.5° F. No vaginal discharge; complains of a little pain after urinating. Ordered a teaspoonful of sweet spirits of nitre. As patient did not sleep much last night, I prescribed 10 grains chloral and 12 grains bromide of potassium, to be repeated in an hour if sleep be not produced.

6th.—9 a.m.—Slept well without any chloral, and feels much refreshed; good appetite; still some pain after passing urine; to repeat nitre. Pulse 95, temperature 98.5° F. 2.30 p.m.—Pulse 95, temperature 100° F. Relished dinner of chicken, baked potatoes and prunes. 9 p.m.—

Feels tired and worn ; pulse 104, temperature up again to 103° F. Possibly I allowed too hearty a dinner. Gave aconite.

7th.—9 a.m.—Pulse 90, temperature 99.5° F. Slept well last night ; good appetite and feels well. A small shred of membrane came away again to-day, while washing the vagina. If the temperature rises again to-day I propose to wash out uterine cavity. 11.15 a.m.—Temperature 98.5° F. Gave permission to move from the bed to a lounge, for a short time. Bowels moved by enema. 1.30 p.m.—Was lifted from bed to the lounge, and enjoyed the change. Pulse 100, temperature 101° F. 3 p.m.—Pulse 104, temperature 102° F. I gently introduced a catheter through the os uteri, and slowly injected two pints of carbolized water, 1 to 30. No pain was caused ; water flowed back very slightly stained. 6 p.m.—Sent for. She had had a slight chill ; pulse 108, temperature 104.5° F. Frontal headache. Gave an extra dose of quinine, and ordered aconite every half hour, for the present. 7.30 p.m.—Still burning hot, and headache severe ; pulse 116, temperature 104.5° F. Thinking it well to have the responsibility shared, I suggested a consultation, and Dr. Atherton saw the case with me at 8 p.m. Temperature had by this time dropped to 103.8° F. Dr. A. could discover no fixation of the uterus, nor evidence of any local trouble whatever. Hoping that the high temperature might have been partly caused by the very free use of carbolic acid, we decided to suspend the vaginal washings. It hardly seems possible, however, that such can be the case, for the acid has been constantly used while the fluctuations of temperature have been great, it having been for many days normal ; moreover, the urine has shown no sign of carbolic acid poisoning. Upon Dr. A's suggestion the aconite was discontinued, the dose of quinine reduced to one grain three times a day, and the diet somewhat lowered. 11 p.m.—Has had another chill, lasting half an hour. Pulse 120, temperature 105° F. Gave a dose of nitre. To have milk to drink throughout the night.

8th, 3 a.m.—Sent for ; had not slept any, chilly sensations down arms and legs every few moments, much headache and very tired. Pulse 120 ; temp. 105° F. Gave a dose of chloral and bromide mixture with directions to repeat if necessary. 8.30 a.m.—Slept about two hours after a second dose of chloral. No more chilly feelings, but perspired

profusely. Pulse 120 ; temp. 104.2° F. Feels very worn and tired. No diminution of lacteal secretion. 10.30 a.m.—Pulse 104, temp. 103° F. Has been dozing most of the time since. Takes plenty of milk ; to have brandy and egg, as usual, once a day. 1 p.m.—Still very drowsy, no chills ; pulse 106, temp. 100° F. Prescribed potass. citratis. gr. vi., tinct. opii. camph. m. v., spts. æther. nit. 3ss., to be taken every four hours ; not so much pain after micturition. 2.30 p.m.—Pulse 100, temp. 100° F. 5 p.m.—Pulse 90, temp. 100.2° F. 7.45 p.m.—Just having a chill, pulse 108, temp. 101° F. Feels rather despondent at having chills again. Gave an extra dose of brandy, and used hot bottles, etc. 8.30 p.m.—Chill lasted half an hour, pulse 112, temp. 102.4° F. 11 p.m.—Has had another chilly or rather creepy sensation, lasting nearly an hour. Pulse 120, temp. 104.2° F. To have chloral if necessary.

9th 8.45 a.m.—A better night. Several slight chills, but did not feel as hot after them. Slept several hours without chloral. Pulse 110, temp. 102° F. Some little discharge again this morning, but it is perfectly sweet. NOTE—It is evident that the carbolic acid, had no part in producing the symptoms. Her condition is bad, but not as desperate as the range of temperature would indicate. The question seems to have resolved itself into one of keeping the patient alive, until the poison has exhausted its virulence. 1.30 p.m.—Temp. 102° F. Complains of a pain in right side of chest, upon deep inspiration. Mustard applied and $\frac{1}{4}$ gr. morphia given. 8.30 p.m.—Pain in side better, temp. 104° F. ; no chills, vaginal discharge ceased. 10 p.m.—Pulse 120, temp. 103.8° F., pain troublesome.

10th, 9.30 a.m.—Slept well, until 3 a.m. when pain in side grew very severe. Pulse 108, temp. 103.5° F. Pleurisy seems probable, though I cannot detect any friction sounds. Ordered hot applications to side, and gave $\frac{1}{4}$ gr. morphia and 1-150 gr. atropia. 1 p.m.—Pulse 100, temp. 102. Pain easier, no cough. 6.30 p.m.—Pulse 112, temp. 103.5° F. Has had one or two fits of coughing without expectoration. Friction sounds now detected. Hot applications continued, opiates p. r. n. 9.30 p.m.—Temp. 103° F. ; cough troublesome ; to have flaxseed tea *ad lib.* Takes plenty of nourishment.

11th, 9.30 a.m. Better, slept nearly all night,

cough looser and pain much less severe ; pulse 106, temp. 100.5° F. No chills for 48 hours. 2 p.m.—A very fair day, but little pain, expectorates quite freely a frothy mucus, tinged once or twice, with blood. It is probable, that some pneumonia exists, in connection with the pleurisy, pulse 112, temp. 102° F. As a vaginal discharge again showed itself to day I ordered an injection of carbolized water. 5.30 p.m.—Pulse 110, temp. 101.8° F. 8.30 p.m.—Pulse 98, temp. 100.5° F. Temperature has not been as low for three days. 10.30 p.m.—Pulse 106, temp. 102.5° F.

12th, 9 a.m.—Slept fairly well, but had two or three hard coughing spells, pulse 108, temp. 102° F. Ordered Morph. Sulph. grs. ij. Spts. Chloroformi, ʒij. Vin. Xerici. ad ʒij. M. Sig. ʒi. p. r. n. 12 m.—Pulse 108, temp. 102° F. Cough much easier. 6 p.m.—Pulse 104, temp. 101° F. 10 p.m.—Pulse 104, temp. 102° F.

13th, 10 a.m.—Pulse 96, temp. 100° F. Babe was fretful and patient did not rest well, one or two hard spells of coughing this morning. Port wine substituted for brandy, only a small quantity taken. 12.30 p.m.—Temp. 100.5° F. Expectoration more free, still a trace of blood now and then. 9.30 p.m.—Pulse 100, temp. 101° F. Has coughed but little.

14th, 10 a.m.—A good night, with cough decidedly better ; pulse 96, temp. 99.5° F.

15th, 11 a.m.—Pulse 100, temp. 100.6° F. Has just been informed of the expected arrival of her mother from Toronto ; this has likely run the temperature up, symptoms otherwise improving. An enema was given this morning followed by a good motion. 2.30 p.m.—Pulse 96, temp. 98.5° F. 9 p.m.—Pulse 96, temp. 98.5° F. Has coughed scarcely any, and feels well.

16th, 10.30 a.m.—Pulse 96, temp. 100° F. 2.30 p.m.—Temp. 100° F. More cough to-day and feels tired. Examined chest, no friction sounds, no effusion ; rough breathing over upper portion of right lung, and absence of sounds, with some dullness over lower lobe indicating consolidation. 8.30 p.m.—Pulse 92, temp. 100° F.

17th, 9 a.m.—Temp. 98.5° F. Slept fairly well, cough easier. 3 p.m.—Temp. 99° F. 9.30 p.m.—Cough troublesome, and temp. up again to 102° F. I fear some new complication.

18th, 9 a.m.—Slept well, with but little cough ; pulse 90, temp. 98.5° F. Perhaps the high tem-

perature of last night was due to an error of diet. 2 p.m.—Pulse 80, temp. 98.5° F. Allowed to lie on lounge a few hours. 8.30 p.m.—Pulse 88, temp. 101° F. Can discover no extension of lung trouble. Feels very well, but strength gains very slowly ; ordered stimulants to be used more freely.

19th, 9 a.m.—Pulse 88, temp. 98.5° F. Prescribed Elix. Calisaya, Iron and Bismuth, (Wyeth). A teaspoonful three times a day.

20th, 10 a.m.—Temp. 98.5° F. Cough improving very much and feels better in every way.

21st, 10 a.m.—Temp. 98.5° F. From this time the temperature never rose above the normal point, and improvement was constant, cough grew less and less, chest sounds cleared up and became normal.

July 6th—Went out for a drive, and on this day bowels first moved spontaneously. Toward the last of July, she went on a visit to relations in Toronto. At present writing (Sept. 13th) there is no cough, she has regained her flesh, and is, to all intents and purposes as well as ever.

REMARKS.—The points worthy of notice seem to me to be the following ; and this paper has already reached such proportions, that I can only indicate them.

1st. The success attained in stopping the hæmorrhage, by separating the placenta as the os uteri dilated.

2nd. The, almost fatal, accident from chloroform, during an accouchement.

3rd. The sudden rise of temperature on the 4th and 5th days, followed by an absolutely normal temperature until the 9th day. I cannot doubt that the first rise of temperature was due to blood poisoning, and it would seem as if the second must have been produced by a fresh dose. I attributed it, whether correctly or not, to an escape of septic fluid through the right Fallopian tube, upon the patient first assuming the erect position.

4th. The effect of the aconite. A reference to the text will show that its administration was always followed by reduction of the pulse rate, and in most instances this was accompanied by a corresponding fall of temperature. In suitable cases, I am inclined to think it a valuable drug.

5th. The fact that the constitutional symptoms were not as severe as the high temperature would indicate.

6th. The occurrence of pleurisy on the seventeenth day. As there was no exposure, this was looked upon as a result of the septic poisoning.

DISLOCATION AT THE ELBOW OF BOTH RADIUS AND ULNA BACKWARDS, SUCCESSFULLY REDUCED AFTER THE LAPSE OF SIX WEEKS.*

BY THOS. R. DUPUIS, M.D., F.R.C.P.S.K. AND M.R.C.S.E.

Professor of Anatomy in the Royal College of Physicians and Surgeons, Kingston, and Lecturer on Clinical Surgery in the Kingston Hospital.

This case was admitted to the Kingston Hospital on the 7th of January last, suffering from a backward dislocation of the bones of the forearm at the elbow-joint, produced by a fall which he received over five weeks previous to that time. He was a large, muscular, well-developed man of about 25 years of age, and had every appearance of robust health.

Symptoms on admission.—The usual symptoms were present on admission: His arm was nearly straight, there being only slight flexion at the elbow; there were shortening of the forearm, projection of the trochlea in front and olecranon behind, the hand occupying a position between pronation and supination, but inclining more to the latter, and widening of the distance between the condyles of the humerus and the head of the olecranon. There was still considerable swelling about the elbow, and complete immobility of the joint.

By careful examination I diagnosed dislocation of both bones of the forearm backwards; but after having satisfied myself of the nature of the injury, the more difficult question arose, namely, Can I reduce it after the lapse of nearly six weeks?

Gross states that he has met with many cases where all efforts to reduce proved unavailing after the third week, and sometimes after the second; and he further states that three weeks' duration always renders the reduction of this dislocation very difficult, although he has met with some cases that have been reduced after two months' standing.

Sir Astley Cooper is said to have succeeded in reducing this dislocation after three months; Malgaigne at three and a-half; Blackman, Brainard and Westmoreland after five months' standing, and Gerdy and Drake even at six. But such cases as these are extremely rare, and the danger of injuries to the parts, followed by violent inflammation, suppuration, and gangrene, is too great to justify a

surgeon in making violent and protracted efforts to reduce, where the dislocation has been of several months' duration. Velpeau is reported to have lost a case from this cause.

In cases where reduction seems to be impossible, breaking off the olecranon process by forcible flexion of the arm has been suggested, and there is no doubt that such a measure is perfectly justifiable when we consider how completely useless a straight or nearly straight arm is, and how useful one in a semi-flexed position may be, although the joint may be entirely ankylosed. Re-section of the joint would scarcely seem necessary, except in cases of old standing, when other methods of procedure have all proved unavailing, as in a case which I have in my mind at present.

As my patient was a healthy young man, and stood in need of a useful arm, I decided after due consideration to attempt reduction. The methods of reduction recommended and practised, as you all know, are somewhat various in their modes of execution, but precisely the same in principle; that is, they aim at the same results, namely, to pull the ulna from the articular end of the humerus and to lift this latter backwards over the coronoid process into its sigmoid cavity again. Placing the operator's knee in the bend of the elbow and bending the forearm around it, while pressure downwards is made with the knee; counter-extending by a band around the patient's chest while extension is made by an assistant; bending the arm around a bed-post while the surgeon himself makes extension by pulling upon the hand; placing the heel instead of the knee in the bend of the elbow and with that for a fulcrum attempting flexion and extension by the surgeon himself; and by using pulleys with a band around the chest if the patient is very strong and muscular; or finally, by adopting the method practised in this case with success, and which I shall here detail: The patient was placed upon the operating table and brought fully under the influence of chloroform. He was then placed near the edge of the table, and turned partially upon his side, so that the arm hung free beyond the edge of the table. The middle and upper part of the humerus and the patient's body were grasped and firmly held by two strong assistants, while the hand and lower part of the forearm were seized upon and held by two other assistants. Equable and persistent traction was made, and pressure

* Read before the Ontario Medical Association, June, 1882.

exercised upon the upper part of the forearm in such a manner as would tend to lift it away from the trochlear surface of the humerus, at the same time that extension was being made. I also made pressure downwards and forwards upon the projecting olecranon process with one hand, while with the other I grasped the forearm near the elbow to assist in pulling the ulna from the humerus, and also to direct, at the proper time, the necessary flexion of the arm. After a few minutes of steady effort in the manner here stated, I distinctly felt the joint begin to yield and the bones to separate, the act being accompanied by a sensation as of something tearing. I then directed the assistants who held the forearm and hand to slowly and cautiously flex the limb, without relaxing their hold or lessening the traction they were making upon it. I also continued to bear downwards and forwards upon the olecranon and the upper part of the forearm close to the joint. As flexion was gradually produced, I had the pleasing satisfaction of feeling the olecranon glide forwards, and the trochlea of the humerus assume its wonted position in the vacant sigmoid cavity. The limb was then flexed until the fingers of that hand were placed upon the top of the opposite shoulder; and after extending and flexing it several times to make sure that any new adhesion would be broken up, and that the bones were in proper position, the arm was flexed at a right angle, put up in an adjustable elbow splint well padded, and suspended high up across the breast in a sling.

For the first twenty-four hours there was severe pain, which required to be relieved by morphia; there was also considerable swelling and redness, to control which we kept a lotion of acetate of lead and laudanum constantly applied. All the urgent symptoms, however, gradually abated and in a few days the patient was able to walk about the wards of the hospital, apparently free from suffering, and greatly pleased at the new position in which he found his arm. At the end of eight days we began to make passive motion of the joint, which yielded without difficulty, though, of course, not without some pain.

On the 1st of February, thinking himself well enough, and being able to move the joint to some extent voluntarily, he left the hospital, since which time I have heard nothing from him.

In calling attention to the report of this case, I

do not expect to instruct my brethren in the profession in the diagnosis and treatment of dislocations of the elbow-joint, nor have I entered minutely into details; for I feel that, to assume the position of an authority before so large and learned a body as this is, would be to tread upon dangerous ground, and to reiterate facts with which you are all perfectly well acquainted. Nevertheless, there are some thoughts suggested by the subject which it may not be amiss to discuss, and which might be profitably pondered over by some of the younger members of our profession.

First, then, as regards diagnosis.—The diagnosis of injuries of the elbow-joint are admittedly difficult. The complicated nature of the joint, the number of epiphyses about it which may be separated from their bones, especially in childhood, and the swelling which generally so quickly supervenes, all conspire to obscure the real nature of the injury, and to leave the inexperienced surgeon in doubt as to the character of the lesion before him, and hence unable to pursue the proper line of treatment.

There is no class of cases in which an accurate knowledge of anatomy is so requisite as in dislocations, and none which puts the real knowledge and skill of the surgeon to so crucial a test; and it is a thorough acquaintance with the anatomy of the joints—bones, ligaments, and muscles surrounding them—which alone can qualify the practitioner to become successful in this department of surgery. Several times has it been my lot to see dislocation of the head of the humerus into the axilla, treated as a sprain or bruise by an M.D. until the time for any hope of reduction had past; and the case here reported is the third one of the kind that has come under my care in which treatment by another surgeon had been unavailing; and doubtless many of you, gentlemen, have had similar experiences. This man had been for the five weeks previous to his coming to the hospital, that is, from the receipt of his injury, under the care of another medical man, who not only honestly stated that he could not remedy the deformity of the man's arm, but that he could not satisfactorily decide upon the real nature of the injury. Another case occurs to my mind at the present, which will serve to illustrate the ease with which a mistake may be made, and the effect which such may have upon the reputation of the surgeon.

About eight years ago a little girl *æt.* 10, but who is now a young lady with as fine a pair of arms as one could wish to see, was brought to my surgery for the purpose of having me examine her elbow, which had been hurt three weeks previously. On examination I found the characteristic symptoms of backward dislocation of radius and ulna—partially flexed arm, hand between pronation and supination but inclining to the latter, prominence of the trochlea in front and shortening of the forearm, projection of the olecranon process backwards, and increase of the distance between the internal condyle of the humerus and the tip of the olecranon. The arm was still considerably swelled, but yet all the necessary diagnostic points could be made out. I explained the nature of the case to her parents, and with their consent and assistance chloroformed the child, and reduced the dislocation without the least difficulty. The arm was properly bandaged and in a few weeks all traces of the injury had disappeared. Now the medical man who had charge of the case before I saw it, had pronounced it a sprain and had been treating it with fomentations, liniments, etc., to the damage of the child and the great vexation of her parents. I explained to them the difficulty frequently experienced in ascertaining the exact nature and seat of injuries about joints; but although they listened to me with attention, and no doubt believed me, yet this could not take away their feeling of distrust, yea, almost enmity, towards the other medical man; for they thought that if I could detect the true nature of the injury and remedy it so quickly, the gentleman they had been employing could not be up to the mark as a skilful and reliable surgeon. The consequence was, that he lost not only the practice of that family, but of all the families in the neighborhood which they could influence.

But knowing the difficulties which beset this and some other injuries and dislocations, we should protect each other as far as possible; and any one of us when in doubt should not hesitate to seek the opinion of some competent professional brother. To set this matter before you in a most elegant and emphatic manner, permit me to quote from Skey: "A surgeon is justly responsible to society for the entire restoration of *many* forms of injury to their condition of health, provided no extreme or unusual difficulty exists in the nature of the accident, or arises in the course of treatment, and

is justly chargeable with the consequences of failure; and the records of the law unhappily teem with examples of a compulsory retribution as the award of ignorance or neglect. But in the case now under consideration which sets at naught the knowledge and the foresight of the most experienced, a surgeon can only render himself responsible for the result by the assumption of power which he does not possess, or by volunteering an unguarded pledge of his ability to restore the joint to its former condition of health. This is obviated by a candid avowal of the difficulties of the case, and his willingness to avail himself of the co-operation of others, who can at least lighten his burden by sharing his responsibility."

Secondly, in looking at the *legal aspect* of joint injuries, we should never forget that the elbow-joint offers one of those intricate problems which are too often presented to the surgeon for solution.

In the case of *Hoban v. Parker*, tried twice at the Kingston assizes (the last time in September, 1881), the patient in some kind of a row received a severe kick upon the elbow-joint. The case was diagnosed by the attending surgeon to be a fracture, and treated as such; for some reason, however, gangrene ensued, and the result was that the arm had to be amputated above the elbow. Upon examination of the joint after amputation, the bones entering into it were found to be entire. The plea set up by the plaintiff was ignorance on the part of the surgeon in not detecting the true nature of the injury, and improper treatment by bandaging the limb too tightly. After two trials at court, which must have been a source of great expense and vexation to the surgeon, the jury disagreed as to a verdict, and the case was dismissed; but another emphatic lesson was taught thereby, of the necessity of knowledge and care in elbow-joint injuries, and of the propriety of calling in another surgeon, at least, to share the responsibility in all doubtful cases.

We may here again quote the impressive words of Skey: "The penalties of the law are justly enforced on those who play a single-handed game, by which they deprive their patients of the advantages to be derived from the experience of others; whereas they should rely on the well-known adage, which under no circumstances is more pertinent than when applied to a medical man placed in this critical position, that 'union is strength.'"

Thirdly, we may notice the causes that render this dislocation so difficult of reduction after a few weeks' standing.

Dr. Samuel D. Gross, in the fifth edition of his masterly work on surgery, states that he was not prepared to assign any reason why a luxation that is so easily rectified if properly managed in its earlier stages should so soon become utterly irreducible, resisting and defying all the best directed efforts of the surgeon when allowed to remain for a few weeks.

It seems to me, however, that if we carefully consider the construction of the elbow-joint, and duly appreciate all the displacements that occur in backward dislocation of both bones of the forearm, we cannot be at a loss to assign a good and sufficient reason for the quickness with which this luxation becomes irreducible. Of the four ligaments surrounding the joint, the anterior would in all probability be torn loose from the coronoid process of the ulna; the posterior being loose might escape injury, but on account of its thinness some of its fibres might be broken through; the internal lateral ligament would have its posterior portion which is attached to the inner margin of the olecranon torn through, and the external lateral ligament would suffer laceration in some of its anterior fibres. As regards the muscles, the supinator brevis would have some of its upper fibres torn through, and the remainder put upon the stretch, to be accommodated by supination of the hand. The anconeus would be relaxed, but from its shortness and the projection of the ulna backwards, might be more or less lacerated; the powerful triceps muscle would be relaxed from the approximation of its points of attachment. All the remaining muscles of the forearm, both anterior and posterior, that arise from the internal and external condyles of the humerus, would be relaxed by the projection of the lower end of the humerus forwards towards their points of insertion. The biceps muscle would be put upon the stretch, but this would be partially compensated by the supination of the hand; and the brachialis anticus alone would be the only muscle that would suffer severe stretching and have a tendency to restore the trochlea of the humerus to the sigmoid notch.

Now if we consider that, in three or four weeks, new adhesions will form amongst the lacerated fibres of the ligaments, and of the muscles, and

that all the strong muscles of the forearm and the powerful triceps will have become contracted, shortened and accommodated to their new condition, we can readily perceive that the bones will be held in their new position as firmly as they were previously in their natural one. Thus, the force required to lift the trochlea of the humerus backwards over the coronoid process of the ulna must be sufficient to break up all new adhesions, and to stretch the triceps and all the muscles of the forearm to the same length they were when the luxation occurred. This we know is no easy task, for a muscle requires a great force to stretch it suddenly; and hence the force required to reduce a dislocation of the elbow backwards must be fully equal to that which produced it.

The anatomical and physiological aspect of this dislocation fully accounts, I think, for the difficulty experienced in reducing it after a few months standing, and afford us a clue to the means required for its successful treatment.

Now if we regard injuries of the elbow-joint in any of their phases—whether as to the difficulties attending them—the consequences of improper diagnosis and treatment of the patient—the inevitable results to the surgeon's character and reputation—the legal vexations and expenses that may follow—and the nice anatomical and physiological details which they involve, we must, I think, agree that they form a class of cases that are well worth our careful and intelligent study.

THE CAUSES AND CONSEQUENCES OF DEFECTIVE VISION DURING SCHOOL LIFE.*

BY L. L. PALMER, M.D., TORONTO.

It was not my intention to take up the time of this Association this year with a paper, until about a week ago, our worthy President suggested to me that I write up the subject of hygiene of schools, which in its importance so commended itself to my judgment, that I have undertaken to consider at least one phase of the question which may form a nucleus for further thought—a phase by no means the least important of all the conditions that affect early life—viz., The Causes and Consequences of Defective Vision during School Life.

* Read before the Ontario Medical Association, June, 1882.

It is now admitted by all who study ophthalmology, that the pressing danger of the eye during early life is myopia, or shortsightedness, the organic cause of which is too great a depth of the crystal, which causes the sharp image of an object to form in front of the retina instead of upon it. It is commonly observed by teachers and parents that school work is often associated with, and even hindered by impaired vision; but that it is an evil much to be guarded against and a danger, in many instances truly alarming, has not appeared to them. If an ounce of prevention is worth a pound of cure, and this more valuable prevention in the light of present science and research is more easily possible; if the children of to-day are the men and women of twenty years hence, then it becomes us to turn our scientific labor and much thought to the well-being of children, and see that their physical, as well as their mental health, be properly guarded against dangers unobserved. Delicate as is the eye, it will when emmetropic, and in a state of health, bear any amount of use; but when it has lost its balance, or its normal proportions, its work is done with effort and but imperfectly, and it rarely can be brought back to its original perfection of action, but is prone to lapse into still greater disability of function, or even into actual disease.

It is found from the collected statistics of well-known scientists, such as Enissman, of St. Petersburg; Conrad, of Königsberg; Loring and Darby, of New York; Cohn and Just, of Germany, and others, that myopia is congenital only in a small proportion of cases, that most children, up to 5 or 6 years of age, have normal vision, and from this age up to 15, or according to Donders, 20 years is the period of development of myopia; that few are myopic before this period, and fewer still, if any, become so after; and this is the age when children are pressed into school and are forced to endure all the pains and penalties of the cramming system, in these days too common, which aim at intellectual development at the cost of impaired vision, and sometimes almost of complete loss of sight, if indeed it does not defeat itself in gaining the end it seeks. While these years, from six to twenty—the school life of children—is the period when myopia becomes developed, it is also established by careful and extensive statistics from the examination of over 20,000 school children, that

the defect increased numerically as the pupil advanced through the different grades of the schools. Cohn, of Breslau, found 6.7 per cent. of myopia in the elementary, 10.3 in the intermediate, 19.7 in the high schools, and 26.2 in the gymnasia.

Other authorities quoted above have made similar investigations with like results; and among the causes assigned for this uniform development of it are imperfect light, impure air, bad construction and arrangement of desks and seats, badly printed books; all these conditions are found acting, not alone in the school-room, but at home, when the child returns with a task to perform, which taxes the eyes to a late hour, or after the preparation for the next day is completed. How often do we find the young person engaged with a thrilling story, or a fascinating romance, willing to sit in any remote corner of the room, and strain over a badly-printed and badly-illuminated page, conditions unfavorable to the strongest eye, but most damaging to one pre-disposed by heredity, or otherwise, to myopia. In addition to the above facts it is found that it is more especially proper to cultivated nations, while uneducated people and barbarous tribes are almost entirely free. The Germans are said to show a greater number of myopias than any other country. So much is this the case, that any passing traveller through the states of Europe must observe that spectacles form a notable feature in the German physiognomy. This points at once to their high intellectual status, to their indefatigable labor in intellectual pursuits, and the bad hygiene of their schools and school system, conditions existing in unchecked operation through all their history. There is a general agreement among authorities that a great development or increase of it takes place during school life, and the result is largely due to preventable causes. Brudenell Carter says: "There is no longer any room for doubt, that badly-lighted and badly-fitted schools form a great machinery for the development of myopia. And it is possible that this machinery where, as in Germany, it has for a long time been in unchecked operation, may have an important influence upon the form of the eyeball, which will be inherited by large numbers of the population."

Other authorities make similar statements. Ribot urges that, "Since constant study creates myopia and heredity most frequently perpetuates, the num-

ber of shortsighted persons must *necessarily* increase in a nation devoted to intellectual pursuits"; and Dr. Loring goes still further by saying, that "If by a nation devoted to intellectual pursuits, we mean that compulsory education shall be carried out in the full extent of its original meaning, and applied to every child that is born, be it male or female; and if Germany is going to be taken as the type, and every other nation desirous of intellectual progress be compelled to follow her lead as an example, then I am of the opinion that not only the educated classes, as the term is commonly understood at present, but that the world at large will, in time, become near-sighted." If such views, original and startling as they appear, are near the truth, it becomes a matter of national importance to see wherein the school and its hygienic and architectural conditions act as a cause of near-sight, and discovering the cause, if possible, to remove it.

It is not my intention to construct a model school-room, much less a model home; this can be better done elsewhere. But I may be permitted to mention in brief a few of the conditions causing myopia that are common to both school and home life of the young.

(a) A bad light is one of the most certain causes, situated as it too often is in front of the pupil or at his side, shining with a glare on a level with the eye, producing great irritation, which is the precursor of a progressive myopia.

(b) Anything favorable to congestion of the head, as a bad position of the body, which is too often a necessity from badly constructed desks and seats, or which is perhaps a matter of choice when the pupil of studious habits gets in the corner at home, and with a book in the lap and bent trunk he pores over it till a late hour. Under this head might be included heat of room, wet feet, cold floor, indigestion, excessive length or intensity of study without interruption.

(c) Excessive tension of the eyes for near objects, as when a book is brought too near the eye for hours daily throughout an educational career.

(d) "Peculiarities of food, indifference to ventilation, disregard of other hygienic requirements, want of out-door exercise, and a peculiar tendency toward a sedentary life, all of which are provocative of a certain *laxity of tissue* and want of resistance in the investing membranes, which finds its expression in the eye, in a distension which is in fact myopia."—*Loring*.

We need not go far to show that all these conditions are largely present during school life, and it has been abundantly shown that the rapidity of development of myopia is in proportion to their presence and to the early age at which children are pressed, either by authority or natural inclination with studious habits, regardless of their optical condition. Alarming as the fact appears to the ophthalmic surgeon, and important as is the eye in its intellectual, apprehensive, and discriminating powers, yet there is no organ in the body guarded with so little care, and strange to say, its greatest weakness is popularly counted its strength. We often see myopes comfort themselves by saying that short-sighted eyes are strong, or *healthy* eyes; on the contrary, a short-sighted eye is a *sick* eye, a *diseased* eye, and is very likely, from the habits it engenders, to make a sickly body; quite as much a diseased condition is it as an hypertrophied heart and as little able to perform its functions, and we watch a case of myopia with as much interest and anxiety as you do first an hypertrophied and then a dilated heart subsequent to repeated attacks of asthma. It affects the physical, mental, and moral development of the child. The ordinary sports or plays of the campus are quite too much for him. The cricket, the base-ball, or the lacrosse have requirements beyond his range of vision, and in these he is unable to compete successfully with his fellows; so with a sense of incapacity he retires from the field where the mind gets its recreation and the body its health, and seeks his pleasure and his recreation in his books. This, though at first a pastime, soon become a passion and he becomes a book-worm, engorged with much that an age of rapid printing can supply, without taking time to reflect or digest what he has received. He therefore suffers a kind of mental dyspepsia, which is, to say the least, no evidence of mental strength—a condition as foreign as possible to a true educational process, which is the application of thought or the development of the processes of reason.

A fond parent encourages these so-called studious habits, which become more a habit than a desire for the acquisition of knowledge, and entertains a strong hope that the future will realize brilliant literary accomplishments; but the defect of sight is operative at all times; he becomes retiring, diffident, hesitating, and cautious. His means of acquiring knowledge through outward objects have

been limited to a very narrow field, his own small field of vision. He can see all the beauty of a rose or a violet, but a beautiful landscape or the autumn tints of the forest are all a blur to him, and he knows nothing of the inspiration that comes therefrom. He can see and deal with the minutest mechanism of a watch and delight in it, but finds no pleasure in architecture; he becomes a man of details and intricacies, at the expense of unity and comprehensiveness. He also judges men by their intentions, at quite a disadvantage, and forms wrong opinions of character. Our English language—all language—is so constructed as to be susceptible of ten times of opposite meanings by a few changes in the lines of countenance. Hence, across the table, or in a room, he loses the ever-varying shades of expression that come most directly from the heart, and trusts to the ear, by which he is often misguided. Now all this must have its effect upon the general disposition, upon the character, and the health; and though it may not affect to such an extent every degree of myope, yet the majority, I am satisfied, of those who remain uncorrected, suffer more or less of these disabilities.

There are other optical defects, such as hypermetropia and astigmatism, which affect the individual's comfort, his health, mental attainments and character quite as much; and on these it might be of interest to dwell, as they affect the manhood in an entirely different way; but I will not prolong my paper. Enough has been said to show the gravity of abnormal vision. The attention it should command from both teachers and parents, and the importance of submitting every child to a careful examination of his optical condition before urging him into a long educational career, not only to see whether he is capable of pursuing such a course without danger, but to see that he is supplied with properly-fitting spectacles which, happily for either the myopic, the hypermetropic, or the astigmatic, may now be so given, as to reduce the eye by their help to the condition of a far-seeing eye, and thus permit the individual to cultivate the same tastes and pursue the same occupations as if the eye was naturally a normal eye.

And finally, Mr. President, as you and your confreres are taking such an interest in your duties on the Board of Health for Ontario, and your labors, which will be of inestimable value for the

public weal, are to be expended largely in discovering and applying the valuable ounces of prevention, I may be permitted to entertain the hope that the question that I have but briefly brought before you may not be deemed unworthy your consideration, and that the hygiene of our schools, which is at the very foundation of future society, may receive that attention which it so much demands, and which our science is so eminently calculated to bestow.

Correspondence.

INTERNATIONAL CONGRESS OF HYGIENE.

To the Editor of the CANADA LANCET.

SIR,—I have not written to you before, because England's hospitals would be no subject for remark, as there are few Canadian members of our profession who are not thoroughly acquainted with their extent and excellence, but here I am quite on other ground, certainly not to the profession a *terra incognita*, nevertheless a country the medical institutions of which are comparatively little known, I will therefore give you a very brief description of my visit to the Hospital "Cantonal" and University of Geneva prior to the opening of the Congress.

The grounds around—probably not quite so large as those surrounding our Toronto Hospital—are kept with much taste, the flower-beds well cared for, and the parterres had a very gay appearance. At the porter's lodge we were, on announcing ourselves members of the "Congrès International," cordially received, my companion, a visiting surgeon of the Hospital of Bordeaux, taking the lead in making the request for inspection. At the doors we were most courteously met by the Internes, and by one of them taken all over this very admirably appointed and excellently kept hospital, every comfort, convenience and scrupulous attention to cleanliness being noticeable, whilst the manner in which the patients received their medical attendant, sufficiently testified to the thoroughly friendly relations existing between them. Having gone through the wards of the main building, our Cicerone introduced us to the Surgeon who had charge of the five large tent wards, commencing at a distance from the build-

ing of two or three hundred yards, and distant from each other about fifty yards. Each tent ward is entered by a flight of three or four steps, about therefore three feet from the ground. The polished floors are of narrow flooring, tongued and grooved, and apparently quite air-proof; the shape is a parallelogram of about fifty or sixty feet in length by thirty wide, the walls are of canvass tightly stretched, perpendicular, in height fourteen feet; at that height the sloping canvass roof commences. The bedsteads are of iron, and covered with bright-colored counterpanes. The beneficial effect of these tents in all cases after operation, where there is danger of erysipelas, or any form of septic poisoning, or in cases of ovariectomy, you will readily imagine. The surgeon informed me that they had long abandoned the performance of ovariectomy in the main building. I hope some of Mr. Worts' richly endowed relatives will take it into their heads to furnish our hospital with similarly attractive tent wards. They are occupied here from April until the middle of October, usually.

In the afternoon at two o'clock we repaired to the very handsome and commodious Convocation Hall of the University, a very large Grecian building, with heavy Corinthian columns, occupying three sides of a square, ground floors reached by flight of stone steps, main building with very lofty and wide corridors containing very numerous lecture-rooms and Convocation Hall. The large hall was decorated with French taste, the centre of the amphitheatre occupied by delegates to the Congress; around this, and on the level with the highest range of seats broad foyers as at an opera, running completely around the semicircle on which were placed rows of comfortably-cushioned seats for the ladies or male friends of members of the Congress; above, another wide gallery encircling the amphitheatre, for the general public. This attempt at a "*mise en scene*" may probably suffice for a description. Dr. Lombard, Provisional President, invited Dr. Schenk, delegate of the Federal Council, to welcome the members. Space will not permit an attempt at even an epitome of this speech or those which followed by Messrs. Heredier and Le Counté, Legislative and Executive Officers of the Federal Government of Switzerland; suffice it to say that they were in spirit and delivery all that could be desired. M. Lom-

bard, President of the Congress, and former President of that of 1880, then addressed the assembly. I may here remark that this gentleman is a most admirably preserved specimen of a "boy" of eighty-two, with the vivacity and agility of a young man of twenty. What better illustration could the public desire of a long life passed, I have no doubt, under the influence of hygienic impressions, of the advantages to be derived by a strict adherence to the laws we attempt to illustrate, and in time hope generally to enforce. Dr. Lombard's speech sufficiently displayed that with the "*corpore sano*" he rejoiced in the "*mens sana*," being both eloquent and appropriate.

Mr. Dunant, Provisional Secretary, read a report of their labours relative to the organization of the Congress, and a list of delegates who had enrolled themselves as members. Mr. Lombard, the then Provisional President, declared their labour at an end, but on the vote of M. Pacchiotti, President at Congress of Turin, the President and members of Provisional Committee were confirmed in their several offices. M. Lombard then appointed the following:—

Presidents d' Honneur.—For Present Congress: France—M. M. Fauvel, Pasteur, Bonardel; Italy—Conade, Bodis, Pacchiotti; Germany—Eulenberg, Goltz and Varentalop; Spain—Monlego and Purlegas; Canada—Covernton; United States—M. Formiento, of New Orleans, etc., etc.

A magnificent reception was accorded to the Congress by the Mayor and Municipal Officers of the city. This took place in the Foyers of the Grand Opera. This splendid building is on a smaller scale, the model of the Grand Opera of Paris, erected at a cost of six millions of francs, which, with a very handsome and commodious Ecole de Medicine in the Grecian style of architecture, near the Cantonal Hospital, a large addition to the University, the Museum I think, and the gorgeous cenotaph surmounted by a bronze equestrian statue of the Duke of Brunswick in the Jardine Anglais, pretty nearly exhausted the twenty-eight millions of francs left by this diamond-loving Duke to the city of Geneva. These said Foyers are not, you understand, the large passages giving entrance to the different tiers of boxes, but two very spacious and exquisitely furnished salons in the front of the building. I will not further attempt to describe them than to say, such evi-

dences of magnificence, good taste and advanced knowledge alike in painting, sculpture and frescoes on ceilings, as are so remarkable in the palacé of the Tuilleries, Louvre, and Versailles, are here to be found. In the second salon a very fine band of musicians from the Conservatory of Geneva, delighted the very large assembly by their admirable performance of pieces from the operas of the great masters. In addition to the immense number of delegates from all parts of the world, in the somewhat sombre black evening dress, there was a fair sprinkling of ladies in ball costumes, the bright and varied colors of which offered a contrast to the dark array of the gentlemen. There were exceptions, however; the representatives from Spain, Portugal, Servia, Roumania, Brazil and South America, must, I presume, have been highly distinguished, as the various orders on the lappels of their coats, and the collars of purple or scarlet velvet with pendants attached, must surely have indicated valuable services at different times performed, either in the civil or military service of their respective governments. On Tuesday morning the members repaired to the various sections they had elected as most in conformity with their tastes and line of study. I selected the third, on drainage, sewerage, disposal of sewage, etc., etc., thinking erroneously that all these questions would be treated from a general sanitary point of view, not exclusively from a sanitary engineer's standpoint, and when on Friday I read a short paper on the system pursued in Canada, having perhaps too wide a range, I was immediately brought to order, the President declaring that sewers and nothing else could be there treated of. Accordingly I gave a very brief account of the method employed, or recommended to be employed by our engineers in Canada. The members of the section permitted me to read and speak in English, on the understanding that a resumé should afterwards be given in French, and as I had not a sufficient knowledge of technical terms in that language, my friend, Mr. Adolphe Smith, the very able travelling correspondent of the London *Lancet*, obligingly undertook, and admirably performed the service. I may here remark that a great debt of gratitude is due to Mr. A. Smith, for the admirable manner in which he has represented sanitary engineering, as practised not only in Great Britain but in Canada; he is equally able and fluent in

addressing a French as in speaking to an English audience, and without his presence very many present in the section might have returned with the idea that only in France and Germany have any advances in the science been made. The contrary in everything practical, and best calculated to subserve the object of removal of the excreta as fast and as far as possible, so that it may not return to poison us in our dwellings in the form of noxious gases, or by filtering through the soil, find access to drinking water supplies, and thus convey the germs of various diseases, is I believe the case, for instance the present epidemic of typhoid fever in Paris. In the first section this question of typhoid was taken up by a Hungarian physician, the burden of his discourse being the advocacy of the necessity for an International Convention on the subject. The second section received several reports on the disinfection of schools and hospitals. The exclusive subjects in the third section I have already dwelt on. In the fourth section were various papers concerning school hygiene. In the fifth section the papers were exclusively on demography (statistics). At two o'clock the general meeting took place in the Convocation Hall. The first paper by M. Pasteur, was on the discovery of a new specific micrococci. Pasteur's deserved reputation had attracted a great crowd of the citizens in addition to the members of the Congress, and his discourse was listened to breathlessly. His discoveries pointed to a general method for the attenuation of specific virus by exposure to the oxygen of the air.

Yours truly, C. W. COVERNTON.

Geneva, Sept. 4th, 1882.

NASO-ORAL RESPIRATORS.

To the Editor of the CANADA LANCET.

SIR,—Having read several articles lately on the antiseptic treatment of phthisis, and wishing to try this plan of treatment, I induced a patient to order one of McKenzie's Naso-oral Respirators. The Kingston druggists not having them on hand, one of them kindly sent to Mr. Mills, of Brantford, the agent for the Dominion, who immediately forwarded one. I confess I was somewhat surprised at the simple construction of the little instrument, which, however, seemed very well adapted for the

purpose. But I confess that I was much more surprised, and also indignant, when I was told that the retail price of the little article was four dollars. I really did not know how to put a face on to tell my patient that such was the case, so I compromised the matter by concluding to pay for it myself, and loan it. Let me describe it in a few words for the benefit of those who have not seen it. It is about the size of a small coffee-cup, made out of a bit of light stove-pipe iron, bent somewhat in the shape of a small coal-scuttle, with a little perforated lid in one end, for receiving a small piece of sponge. The thing is so simple and cheaply got up that it might be sold for fifty cents, and then pay 100 per cent. profit. In fact the article as it stands before me might be made of silver plate for one half the price it is sold at. Whether Mr. Mills, the Dominion agent, wishes to make a fortune by selling inhalers, or whether the Edinburgh maker is a rogue I know not, but certainly the price is exorbitant. I have been in practice for 16 or 17 years, and it caps anything I have met, and I wish to call Mr. McKenzie's attention to the fact.

Yours, etc., MEDICUS.

[The regular retail price of the inhalers is \$3.00 each, or \$2 50 by the half dozen. The Kingston druggist no doubt added \$1 for his profit on the transaction].—ED. LANCET.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

A meeting of the above association was held at Clinton, on the 2nd ult. The following members were present:—Drs. Stewart and Hurlburt of Brucefield, Scott and Campbell of Seaforth, Graham of Brussels, Sloan of Blyth, Macdonald of Wingham, Hyndman of Exeter, Hutchinson of Bluevale, and Worthington of Clinton.

Dr. Taylor of Goderich showed a lady 50 years of age, who has regurgitation, both through the mitral and aortic orifices. There is marked pulsation in the episternal notch.

Drs. Stewart & Hurlburt of Brucefield showed a case of well marked peliosis rheumatica. The patient is a man of 52 years of age. The disease is of three years standing, of an intermittent character. Regurgitation through the mitral orifice and

commencing degeneration of the heart. The disease so far has been uninfluenced by salicylic acid, iron and the alkalies. There is no change detected in the blood.

Dr. Hutchinson, of Bluevale, showed a case of epithelioma of the clitoris. Dr. Worthington of Clinton, gave a report of a long standing case of catarrh of the bladder, continuing 27 years and gradually getting worse.

Dr. Graham, of Brussels, exhibited some very good specimens of tubercle bacilli stained according to Ehrlich's method. He had tried Baumgarten's method but failed to make them visible. The sputa was taken from a patient well advanced in phthisis.

After the usual routine, the following very pleasant incident took place, viz: The presentation of a very handsome gold watch to Dr. Stewart of Brucefield, on the eve of his departure for Vienna. The *souvenir* was accompanied with the following address, which was read by Dr. Worthington:

DEAR DR. STEWART,—Your professional brethren, both in and out of this Association cannot help feelings of regret at your intended departure from among us. It is possible that not all, or any of us, may meet you again, and we desire before you leave, to express in some degree our appreciation of your unvarying courtesy and kindness—of your enthusiasm in and devotion to medical and surgical science—and of your entire unselfishness and willingness to render all the aid in your power to the members of the profession. Mainly through your efforts this association has arisen from a dormant state to be a successful and well known institution within and even beyond the boundaries of Ontario. Our desire is that our memories may be stored away in your heart, so that you can occasionally commune with us in your absence. In the name of, and by the wish of your professional co-workers we beg to present to you this memento as an indication of our regard. We wish you a happy and prosperous journey and entire success in the line of study you intend to pursue, and more than all we wish your safe return, that we may again see your face. Dr. Stewart made a very appropriate reply.

Dr. Graham of Brussels was elected Secretary of the Association in the place of Dr. Stewart.

The editor of *Walsh's Retrospect* having started a vaccine farm has found the new calling so successful as to necessitate a temporary suspension of the journal. He promises that he will take it up again in January.

Selected Articles.

SEVERE INJURY TO THE HEAD.

Clinic by ROBT. JOHN GARDEN, M.D., C.M., *Aberdeen Royal Infirmary.*

GENTLEMEN.—The first case I bring under your notice to-day is the man I now show you, who has been under observation for some time in the wards. His history is as follows: He was admitted on October 16th—that is, fully three weeks ago. The account given of him was that when drunk he fell down a stone staircase, lighting on the back of his head with considerable force. He was brought to the hospital, and his condition was found to be this: On the back of the head there was a contused wound of the scalp, running cross-ways, and about one and a half to two inches in length. The bleeding was considerable. The wound extended in depth to the bone, the pericranium being laid bare. On examining with the finger there was no slit or depression in the bone. Blood was issuing in moderate quantity from the nose and left ear. Generally, the patient was insensible and lay on his back with the muscles of the extremities relaxed. The face was pale, the skin generally blanched, with the surface cold (temperature lowered). The pupils were regular, rather dilated, acting slowly to light. The breathing was shallow and quiet, with occasional sighing. The pulse was 60, small, empty, and uneven. The treatment adopted was simply application of warmth to the surface of the body, and attention to the wound, which was washed with a solution of carbolic acid and dressed with antiseptic dressings.

October 17th; Pallor on left face and skin; patient beginning to be restless; insensibility not so deep; can be more easily roused; is irritable when disturbed, especially if his eyes, which are kept firmly closed, be opened, speaks incoherently when roused. Retention of urine, catheter had to be used. Pulse 100, fuller, quicker, and more even; temperature 101°. Wound doing well.—18th: Patient still restless and irritable; lies on his side with legs and arms flexed; face flushed and head hot. Pulse 102; temperature 102°. Cold applied to head. Wound doing well.—19th: Patient still restless, irritable, confused, and incoherent. Pulse 108; temperature rose in the evening to 103.5°. Patient had an enema of house medicine and soap. Use of catheter no longer necessary. The high temperature continued for several days, and gradually subsided; the patient gradually regained consciousness and became rational. Pain in the head was complained of and deafness. He is now as you see him, almost well. He complains occasionally of pain in the head, and feels dizzy when he stands up. His memory

is somewhat defective, and his manner generally is peculiar. Temperature and pulse are normal. On the left ear he is very deaf. On examination with the speculum, there is a raw line extending across the membrana tympani, pointing to a rent having been present.

The second case I shall relate is a most interesting one. About two years ago I was called to see a youth, aged seventeen, who had sustained a severe injury to the head. The history I got was that the lad was standing with his hands in his pockets near some companions who were throwing the hammer. His back happened to be to the thrower. The hammer swerved from a straight course, and made directly for the boy's head. He was called to, ducked his head, but only so far as to bring it exactly athwart the parabolic course of the weapon, which felled him bleeding to the ground. When I saw him he was lying on the floor of a house into which he had been carried. On the upper and back part of the head to the left side there was a wound surrounded by a considerable swelling of a soft, doughy nature with hard edges. Generally he was insensible, or could be roused slightly when spoken to very loudly; the face was pale, and the surface of the body cold; the breathing was shallow, quick, and tolerably regular with occasional sighing; the pupils were unaffected, sensitive, though somewhat slowly, to light. On consultation with Dr. Rodger it was resolved to enlarge the existing wound, and evacuate the blood effused into or below the scalp. This was done in order to examine the state of the bone. On doing so, and getting rid of a large quantity of effused blood, there was found a large deep, circular depression of the skull, with a diameter of at least three inches, and corresponding to the globular hammer which struck it. The outer table of the skull was shattered, several large fragments were removed, and these I now show you. The inner table was depressed, but regularly, that is to say, there appeared to be no spicula projecting into the brain likely to give rise to irritation. As the symptoms were solely those of concussion, and no signs whatever of compression manifested themselves, the edges of the wound were brought together, except at the centre, where a sufficient opening for the escape of any discharge was left. Cold water dressings were applied. Sometime after this the patient vomited. Now, gentlemen, it would but weary you to detail the course of this case. Suffice it to say that it ran uninterruptedly towards recovery. Under the influence of warmth to the surface of the body, the symptoms of collapse gradually wore off. The mental symptoms disappeared, and consciousness was slowly recovered. There was no great reaction. The temperature at no time rose much above 100°. From first to last there was no unequivocal sign of compression. The wound healed slowly by granulation. The

youth is now in perfect health, bodily and mental, bereft, it is true, of a large piece of the outer table of his skull, and having a permanent depression of great depth and size of the inner table.

The third case is that of a dyer, aged fifty-three, who was admitted into Jacob's Ward on the forenoon of Saturday the 22nd of May last. The account was that when drunk he had, that forenoon about 10 o'clock, fallen down a stone staircase and alighted on the top of his head. At the visit at 12 o'clock his condition was as follows:—He was lying on his back, insensible but not profoundly so, for he could be roused when spoken to loudly, but only roused. His face was pale, surface of body cold. The pulse was about 80, small and empty. The breathing, though slow, was shallow. The pupils were slightly contracted but regular. On the top of the head, on the right parietal and frontal bones, there was a slight swelling, but no wound or depression. That was at 12 o'clock. In about an hour and a quarter—that is, about three hours and a quarter after the receipt of the injury, matters had very much changed. The insensibility had increased and developed into profound coma. The pupils were now irregular, the left was much dilated and right still contracted. The breathing was slow, deep, stertorous, with puffing of the cheeks. The pulse was fuller and slower. The left arm and leg were rigid as compared with the right. The urine was retained and contained albumen. The swelling on the top of the head was much more distinct. Rapid intracranial effusion of blood was diagnosed. A consultation was held to consider the propriety of an operation. It was concluded not to operate on the grounds that the patient appeared to be moribund, and it was impossible to say in what part of the brain the bleeding was taking place, whether on the surface or at the base. This decision I afterwards had reason to regret. Meanwhile the symptoms progressed. The rigid muscles of the left side became paralysed. The face became flushed, and perspiration poured from it. The pulse was now full and very slow, but immediately before death small and quick. The temperature rose, and immediately before death was 104°. The patient died thirty-eight hours after the receipt of the injury. At the post-mortem examination there was extravasation of blood in the scalp over the right frontal and parietal bones. There was simple fissure of the skull, at the interior part, being separation of the inter-parietal suture, and, as it extended backwards, diverging into the right parietal bone. There was no depression. The upper surface of the brain was lacerated, and a large quantity of blood effused below the dura mater. The kidneys were granular.

Injuries to the head have always had and always will have a peculiar interest to the surgeon. In the literature of surgery, affections of the head and

brain occupy a very prominent place. Since the classical writings of Pott and Abernethy much has been written on these, as they have received the most careful attention from all surgeons of note. For this there are many obvious reasons. Extremely liable to injuries of various degrees of severity, from a slight cut or bruise of the scalp to severe compound fracture of the skull and laceration of the brain, it falls to the lot of every surgeon, nay, every practitioner, to treat many of these, and on the judicious or other management of even the apparently most trivial cut may depend to the patient consequences of the gravest kind. In these the possible dangers immediate or remote are very many, and in these more than in any other affections that I know of is the unexpected wont to take place. A patient comes to you with a slight cut on the head the result of a fall or blow. You, thinking the matter trivial, assure your patient that the injury is of no moment, and dismiss him after a two minutes' consultation, occupied mainly with general remarks. You hear nothing of him for a few days, when you are sent for to see him and find him in bed. A rigor and it may be sickness have seized him. The wound looks angry, a suspicious redness surrounds its edges. Great general depression characterizes your patient, and despite all your precautions your patient, especially if he be an elderly and debilitated individual, is dead within a week of receiving his injury from erysipelas of the most malignant type. On the other hand, you are called to a case where very severe injury has been received. You find severe contusion to the scalp and soft parts, unmistakeable fracture to some part of the skull, and with it very great depression, while the general appearance of the patient is alarming in the extreme. You rapidly form and express a prognosis of the worst kind. Notwithstanding this the patient may take a turn, reaction set in, and complete recovery take place. Now these are no fancy pictures, they occur in practice every day, and the fact that they do teaches these two lessons. In the first place think not too lightly of any injury to the head, however slight it may at first sight appear; warn your patient of the possibility of serious mischief accruing if the wound be neglected, and if serious consequences follow—as they may do in any case—then you are commended for your foresight. On the other hand, however desperate the case may appear, do not too rashly volunteer a bad or fatal prognosis, as you may find yourself very unexpectedly in the wrong. Hippocrates it is, I think, who, with his usual sagacity, has a remark to this effect, that no wound of the head is too trivial to be neglected, and no injury too severe to be beyond hope; and Hippocrates undoubtedly is right.

Now, with these general remarks, let us look a little more closely at the cases I have brought under your notice. These are very fair examples of

the conditions known as "cerebral irritation," "concussion," or commotion of French writers, and "compression." Now, the first remark I would make is that one of the difficulties we, as clinical teachers, have to contend with is that students straight from systematic lectures, or from reading books, are apt to expect to find cases much more typical, so to speak, than they usually are. For example, take "concussion" and "cerebral irritation," two conditions, each presenting a certain series of symptoms, with which you are familiar in your systematic lectures. Now, you find, and this is only a necessary condition of the systematic exposition of a subject such as the one under consideration, certain symptoms given as characterizing the one, and certain symptoms as belonging to the other of these states. From this you would expect to find in actual practice each example of the one condition or of the other sharply defined, so that you would be enabled to say categorically this is "cerebral irritation," or this is "concussion," as the case may be. This is far from what you will really experience. The science of clinical surgery is of the most concrete kind, each case forming a problem to be solved in itself, generalizations, being only to a certain extent applicable.

Of the cases I have cited two recovered and one proved fatal. Look particularly at the symptoms of the early stage, and you will be struck with the similarity of these in all three cases. In all three had been a severe blow to the head. In all three there was immediate insensibility; in all three there were paleness of face and pallor of body; in all three there was shallow breathing; in all three there was small, rather slow, empty pulse; in all three the pupils were neither dilated nor contracted, but regular and acting slowly to light. These lasted for a longer or shorter time in all three. Now, what do these symptoms point to? Well, they are just the symptoms of "concussion"—that is to say, they are the symptoms which you find after a severe blow to the head, when either recovery takes place, or death may quickly follow, and the post-mortem examination may show neither depression of the skull, nor laceration of the brain, nor effusion of blood. In other words, there was in all three, disregarding meanwhile the termination of the cases, a first stage of "concussion." This is what, I believe, happens in the great majority, if not in all, cases of severe injury to the head; indeed it is difficult to conceive of the possibility of force sufficient to cause fracture or laceration of the brain and hæmorrhage being applied to the skull without causing this "concussion," especially when it is remembered that a mere blow from the fist often suffices to cause stunning, which is no other than slight concussion with temporary effects. From this statement it follows that it is, strictly speaking, incorrect to compare or contrast "concussion" with "cerebral irritation" and "con-

pression"; for, as we shall afterwards see, these belong to different stages although of the effects of a blow.

Now what is this "concussion?" What is this obscure, mysterious condition which is accompanied by symptoms so severe, and which may be so transient? Much has been written on this subject, and the older writers were greatly in the dark about it. They were therefore left to assumptions which recent investigations have clearly proved to be untenable. Before referring to the explanations which have been offered, I should like to point out that the one outstanding symptom common to these cases is insensibility of greater or less profundity and of longer or shorter duration. This points to a suspension of the functions of the cerebrum, and the question is, "How does a blow, how can a blow effect this? The answer to this resolves itself into an account of what pathology and physiology have taught us on the matter. It must be remarked that the pathological changes in the brain are often remarkably slight to appearance and may be overlooked. This it was that misled Pott and writers of his time, and drove them to the first assumption in regard to the condition of the brain—viz., that as a result of the blow vibrations occurred: these reverberated from the side of the skull opposite to that receiving the blow; and thus, by a series of reverberating vibrations, there was caused molecular displacement of the minute elements of the brain. Now, gentlemen, consider for one moment, and do you think it at all probable, having regard to the extremely fine constitution of the brain, that all this shaking can take place without producing laceration and consequent hæmorrhage? But apart from this, is there reason to believe that a blow, however severe, can, in the conditions in which the brain is placed—viz., in a cavity with unyielding walls, and completely filling that cavity—I say is there reason to believe that a blow can produce such a through and through shaking and misplacement of molecules as this theory supposes? Experiments of a very interesting kind come to help us here, and, to my mind, settle the question in the negative. Alquié and Cama took a glass vessel, filled it with material with the consistence of brain, suspended in it a number of fine dark threads, and then concussed the vessel. No motion of the threads what ever was observed, showing that, although there may have been motion of the whole mass, the individual particles did not move. Similarly skulls filled with sand, in which an opening covered with a membrane had been made, and into which a long needle with paper on the end had been sunk gave entirely negative results. There is, in fact, no evidence that such molecular changes as supposed by Pott to take place occur, and his theory consequently falls to the ground.

Another theory is that based on the discovery

of Rokitsky and Nélaton—viz., a number of minute extravasations of blood in the brain. The theory was that the pathology of concussion was just a confusion of the brain with small extravasations. Unfortunately for this theory, it is an undoubted fact that cases occur where these apoplexies are entirely absent; and all, therefore, that can be inferred from their presence is that concussion and confusion occasionally co-exist.

I come now to the third and by far the most feasible theory of concussion—viz., that propounded by Fischer of Breslau. It is shortly stated thus: The blow to the head produces reflex paralysis of the vessels of the brain. Serious interference with the nutrition of the cerebral ganglia is produced, and this it is which give rise to the symptoms of concussion. In this connexion it is necessary to state that the one constant condition found post-mortem in fatal cases of concussion is an empty state of the arteries and a congested state of the veins. This is the pathology of concussion. Looking at the question from a clinical point of view, and without going minutely into the matter, which would be impossible now, it will suffice to ask, and if possible answer two questions—viz., 1. Can a blow applied to the head produce this paralysed state of the vessels? 2. Given this condition of the vessels, does it account for the pathological appearances found after death and the symptoms during life? In regard to the first question, there is evidence that a blow can produce such a condition. It is well known that irritation applied to the skin may produce a marked reflex effect on the vessels of the brain and elsewhere. Nothnagel irritated by electricity the skin in the neighbourhood in rabbits, and thus produced reflex contraction of the vessels of the pia mater. This contraction, however, was always of very short duration, and as Fischer points out, does not explain the duration of the symptoms of concussion. Other experiments, however are more to the point. Goltz has shown in his well-known experiment of giving a blow to the belly of a frog, that paralysis of the heart and vessels can be produced, and that symptoms very similar to those of concussion, accompany it, while Koch and Filehne, by concussing the skulls of dogs and rabbits by a series of rapid blows with a hammer, produced the same results. These experiments go very far to answer in the affirmative the first question. In regard to the second question it is sufficient to say that an empty state of the arteries and a congested state of the veins is the only condition which is found constantly to accompany the symptoms which clinical observation discovers to be those of concussion, and that this condition is that which results from paralysis of the vessels, and, it may be, a partly paralyzed state of the heart. So much for what I have called the first stage of all the three cases, and its explanation. In all three the symptoms

were identical; the cases differed only in the duration of this stage.

On following the cases further, they are now found to diverge. What is called reaction sets in. The paralyzed condition of the vessels and heart begins to wear off. The tide of stronger circulation sets in. In the first case the symptoms I have described manifested themselves. They were—(1) Patient extremely irritable; (2) patient lying on side, with legs drawn up; (3) eyelids firmly closed; (4) quick pulse and fever, temperature reaching 103° ; (5) mental symptoms lasting two or three weeks. Now what do these symptoms indicate? They are fairly marked symptoms of a condition which has been called "cerebral irritation," and what is that? I believe it to be no other than a variety of the stage of reaction, or more properly perhaps a degree of reaction. It is probably due to a hyperæmic state of the brain, more particularly of the meninges, as evidenced by considerable rise of temperature and of febrile symptoms generally. The symptoms of this condition have always appeared to me to be very similar to those found in non-traumatic cases where inflammation of the membranes of the brain is believed to exist. But what of laceration of the surface of the brain? Is that not the pathology of cerebral irritation? There is no positive evidence to show that it is. Experiments on animals prove that the cerebrum can be cut or torn to a considerable extent without giving rise to marked symptoms. Clinical experience points to the same conclusion. In a remarkable case which happened in this hospital, under the charge of the late Dr. Kerr, where a man bending forward in front of a circular saw in motion, had his forehead ripped open, and the brain so lacerated or torn that a considerable quantity of brain substance escaped, recovery took place without any marked cerebral symptom whatever. It is extremely doubtful if laceration *per se*, and apart from hæmorrhage and secondary changes, does give rise to any symptoms other than those that would result from destruction of the part of the brain lacerated. It is certainly not rational to ascribe the symptoms of cerebral irritation to superficial laceration. Be the exact pathology of cerebral irritation what it may—and our knowledge of matters cerebral is anything but complete—what I wish to point out is that, looked at clinically, it belongs to the second reactive stage of concussion, and it is therefore as unscientific, as inconsistent with observation and fact, to contrast it with this as if it were a distinct condition *ab initio*. One other symptom in this case calls for remark—viz., bleeding from the ear. What did that indicate? In this case probably only rupture of the membrana tympani. There was no escape of clear fluid, and therefore nothing to point to fracture of the base of the skull.

The second case was a more typical one of

concussion, where the symptoms gradually subsided, the general paleness disappeared, the pulse recovered, and consciousness gradually returned. Vomiting took place as reaction began. The reactive febrile symptoms were moderate. Perfect recovery took place. The interest attaching to this case was the depression of the skull. In this case there was about as much depression as well could be, and yet from first to last there was not a single symptom of compression. Now, this raises the important question. Can depression of a fragment of bone, acting as it does on only a comparatively small part of the brain, and apart from any secondary changes which may take place as the result of the blow and depression, give rise to symptoms of compression? If this case teaches anything at all it indicates that it is exceedingly doubtful if it can. Now, gentlemen I do not wish to speak dogmatically or infer too much from one case, but a case such as this, admitting the possibility of such a thing, forms a very staggering exception, and, I think, has great value attaching to it when weighing facts and evidence *à propos* of this question. When it is remembered that previously, symptoms were ascribed to compression which belong to concussion simply because depression was present, and when the fact is taken into account that experiments on animals performed by Pagenstecher and others (which I need not detail) show that distinct symptoms of compression come on only after a large quantity of fluid is forced into the skull and produces great pressure on the brain, then it is extremely difficult to see how a depressed piece of bone, exerting at most a comparatively slight degree of pressure and existing only on a very limited part of the brain, can determine symptoms so marked as those of real compression.

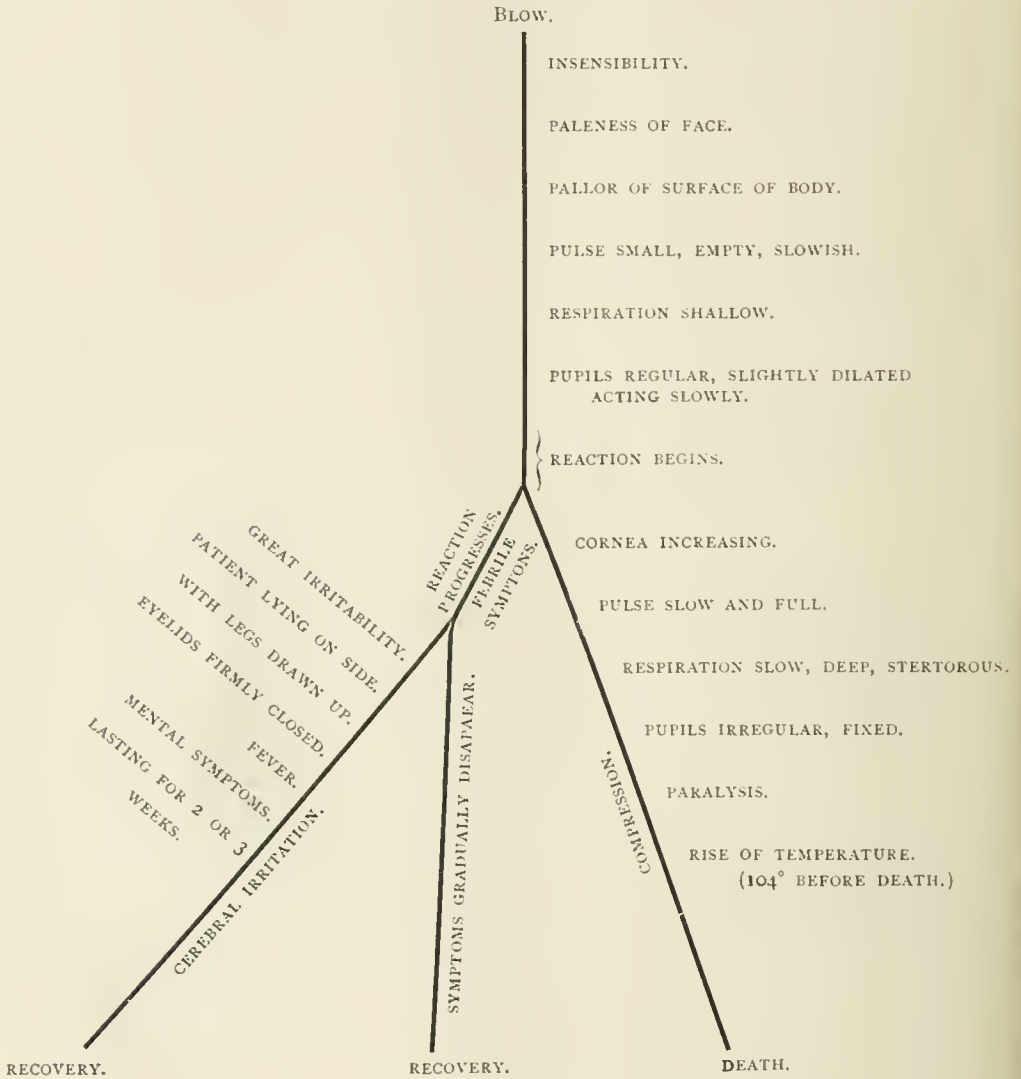
If, then, depression of bone does not produce symptoms of compression, what does? Our third case, I think, goes far to answer this question. Here we had a first stage of concussion, and here, too, reaction set in, but with a very different result. There being considerable laceration of the brain and rupture of vessels, with the recovering circulation hæmorrhage took place. There was found post mortem a very large effusion of blood. Now, apart from an effusion or abscess formation that may occur later in the history of any given case of injury to the brain, it is highly probable that this is the constant cause of real compression occurring early. What, then are the symptoms of these conditions? Our case gives us them. They are:—(1) Coma increasing in profundity; (2) pulse becoming slow and full; (3) respiration becoming slow and stertorous; (4) pupils uneven; (5) paralysis; (6) temperature rising as symptoms increase. These are unmistakable symptoms, and they come on after symptoms of concussion; and, like cerebral irritation, compression is an outcome of concussion. Instead, then, of putting the symp-

toms of these conditions, as is usually done, in parallel columns, I have arranged the symptoms in diagrammatic form (see next page), showing at a glance the course any given case of injury to the head may take. Of course this table has not reference to any secondary complication that may arise, such as abscess formation, and it should be remembered that all the stages vary much in duration in any given case. If death takes place from concussion *simpliciter*, as it may do, then it is likely to occur very early. So much for the symptoms. As to *diagnosis*, our cases did not present any great difficulty. In the third case, at one stage the question "Drunk or dying?" might have occurred; but the very rapid course of the symptoms very soon made the real state of matters clear.

Now, gentlemen, what do these cases teach us as to the *treatment* of severe injury to the skull? In other words, suppose you were called to see a case similar to any of these I have described; what would you do? and why? In the first stage the indications would be to restore the enfeebled circulation. This is effected by applying warmth to the surface of the body by means of hot bottles, etc. If the collapse be profound, friction to the surface of the body, or the application of an irritant, such as mustard, will do good. It is no use being too efficacious at this stage, as time must be allowed. During the reactive stage, if there be symptoms such as those we have in the first case—viz., those of so-called cerebral irritation, then cold to the head, shaving the hair, darkening the room to obviate the irritating effect of light, will be beneficial. If there be insomnia bromide of potassium, alone or combined with chloral, will be found useful. In all cases attend to the bladder and bowels, keeping the latter tolerably freely open. In cases such as the second the indications for treatment are few beyond attention to the bowels. But this case and the third case suggest very interesting questions as to local treatment, and more particularly as to when and what operative procedure should be employed. What are the conditions that render early trephining necessary? This is the great question that has divided surgeons. Pott laid down the law very strongly that this operation should be done in all cases of fracture of the skull with depression, and, after describing the operation and various measures to be employed, he complacently indicates that the surgeon who has adopted these may say to himself, in the words of Pope,—

"Thus far was right; the rest we leave to heaven."

Heaven, however, was not in many cases too propitious. This dictum of Pott's was followed by surgeons at the time blindly. Thus it has been too often in the history of surgery. Many a *hereditas damnosa* has been handed down in this way. Abernethy, however, put a check on it; and from the observation of cases where he found that frac-



ture with depression did not of itself in every case or in the majority of cases, prove fatal, advised waiting for symptoms. He simply used his own judgment, and he was right. What do our cases teach us on this point? If there be anything that our second case proves at all, it is this, that fracture of the skull with marked depression is not an indication for trephining. But it teaches more; it shows that compound fracture with depression is not an indication for operating. This is just exactly what would be expected from what I have already said when discussing the symptoms as to depression being a cause *per se* of compression. Depression of a part of the skull, it was argued, cannot give rise to symptoms of compression. Elevation, therefore, is no use. But what of our third case? In this case there were indications for trephining; and I regretted that the operation was not done, although the reasons for not doing it were quite valid. There were distinct indications of compression, although without depression, and it would have been interesting to have seen if these would have been relieved by opening the skull. Here, again, we have corroborated what we have previously said as to the cause of symptoms of depression coming on early—viz., that they are probably due in all cases to rapid intra-cranial hæmorrhage. What, then, are the indications for trephining early in severe injury to the skull? They may be, I think, arranged under the two following heads:—

1. When there is reason to believe that there is rapid intracranial hæmorrhage going on with or without depression. This fact will generally be indicated by such symptoms as I have described in the third case, but a presumption may be afforded in favour of bleeding from the exact situation of the injury. For instance, if there be a fracture at the interior inferior angle of the parietal bone, it is quite possible that the middle meningeal artery may be injured. This does occasionally happen and should be kept in view.

2. When a foreign body has penetrated the skull and is lodged in the brain, and cannot be removed without enlarging the opening. These are the indications for early trephining. But what, you will say, of stellate fractures, do these not present absolute indications for operating? In answer to this I would say that it is extremely questionable if they do. But granting that they do they come under this second head, for in these the presumption is that the inner table of the skull being shattered the fragments are driven in upon the membranes and are thus for all practical purposes foreign bodies which sooner or later will by their irritation cause inflammation of the membranes of the brain.

Gentlemen, I have touched upon various points of great interest in connexion with injuries to the head. It has not been possible to discuss these

fully within the limits of one lecture. I have endeavoured to explain the more salient symptoms of the cases I have described to you and to draw what practical conclusions the facts fully warrant. I trust that what I have said will in some measure stimulate you to the study of these all-important affections.—*Lancet*.

SURGICAL CASES.

BY L. BAUER, M.D., M.R.C.S., ST. LOUIS, MO.

CONTRACTION OF THE KNEE-JOINT AND ITS RELIEF.

The patient is a well-built, well-developed, and muscular individual, thirty-seven years of age, used to work requiring strength and endurance. Until he met with an injury in March last, in the St. Louis Tunnel, his health had been good. The injury consisted in a blow upon the right knee-joint. Pain and swelling ensued. Nevertheless, he continued to work for about eight weeks, pain gradually increasing. At last, he had to lay up, and remained helpless for several months. During this time, his limb became flexed, and all efforts at extension were so painful as to prohibit their renewal. Thenceforward he resorted to crutches.



FIG. 1.

In July he presented himself at our clinic. The knee-joint was virtually sound and painless. Its motion, within a limited range, free; the patella in place and movable; but extension could not be effected without painful resistance on the part of the inner hamstring muscles. Their contraction could not be, even temporarily, subdued by profound anæsthesia. Fig. No. 1 represents the condition of the patient on admission.

It would seem as if at no time the integrity of the articulation had been disturbed. Probably a concussion at the internal condyle of the femur, lays at the foundation, explaining the unusual contraction of this muscular group.

After myotomy of the contracted muscles had been performed, the limb could be extended without force, and held in straight position by a plaster of Paris bandage. The case is not recorded as something extraordinary, but as an encouragement for younger practitioners, who, not infrequently, exaggerate the obstacles in dealing with such cases. If placed in charge of recent injuries to the knee, a prompt immobilization of the joint is a sure preventive of deformities.

SUPPURATIVE COXITIS—EXSECTION—RECOVERY.

The history of this little patient is painful to relate. Once he was a healthy, vigorous, and lively little chap. A fall upon the trochanter major excited coxitis with its concomitant malposition of the extremity. A professional neighbor scented dislocation of the femur. But when he had done with the little sufferer, the inflammation had advanced to suppuration, and the apparent elongation of the limb had given way to apparent shortening. Another son of *Æsculapius* gave him the benefit of weight and pulley, and the answer was an abscess in the groin.

Then our clinic had a chance. Admitted to the hospital department, we had ample opportunity to elicit the entire complex of symptoms. The clinical records of the institution relate briefly as follows: "General attenuation and debility; fever, with daily exacerbations; no appetite; thirst prevailing; tongue coated, its margins moulded by the teeth; bowels either sluggish or loose; sleep frequently broken by that peculiar pain in the affected extremity, so characteristic in coxitis, and obviously excited by reflex spasms; pelvis elevated; extremity flexed—adducted and inverted; abscess in Scarpa's triangle; group of adductor-muscles and the tensor vaginæ femoris rigidly contracted; limb more reduced in circumference than its fellow; shorter by two and a half inches." The case is obviously of traumatic origin; but the pedigree on mother's side shows pulmonary tuberculosis; father fine specimen of physical perfection.

From the records, the case is a grave one, admitting of no favorable prognosis. Moreover, a

malarial country surrounds the patient's domicile, and has made some impression upon liver and spleen, both being enlarged. Notwithstanding unfavorable circumstances, the patient rapidly improved under treatment: 1. Division of contracted muscles; 2. Immobilization of the affected articulation, both securing its absolute rest. Thenceforward, undisturbed sleep. Internally: Quinine, to subdue the fever; generous diet, with Trommer's extract of malt (Fremont preparation), alternately in combination with iron or cod liver oil. It will be seen that the abscess was not touched. In renewing the plaster bandage, the abscess was found diminishing in size, and entirely painless. Very likely, the healthy surroundings and the hygienic advantages of the college building, had something to do with the rapid amelioration of our patient, at least as far as the malarial infection was concerned. When the warm season set in, we permitted the patient to return home, not before, however, we had the plaster-bandage replaced by Thomas' splint, raised the healthy extremity by an iron frame two inches in height, and provided a pair of crutches. Occasionally the patient was brought to town and submitted to our inspection. He was doing well, and fast assuming a healthy outlook.

In August of the same year (1881), the measles broke out in the neighborhood. The patient was promptly removed to a farm, but unfortunately too late to escape the scourge. The attack was rather mild, and terminated without any unfavorable occurrence, except that it most disastrously compromised the progressive convalescence of the articulation. During the supplementary crisis of the measles, the joint became painful. The abscess, which had by that time, entirely disappeared, refilled, and by the inflammatory condition of its environs manifested the irritant character of its contents. When forced to be opened, it discharged matter of two distinct and separate periods; one part semi-solid, caseated, in a state of fatty degeneration; and another fluid somewhat decomposed, encompassing organic detritus, obviously of recent date.

The constitution reflected the effects of this state of things. Fever returned, and extensive decay of organic tissues became obvious. On motion of the joint crepitus was discovered. Exsection was recognized as the ultima ratio, and consequently executed, the head, neck, and part of the trochanter major, being removed on account of caries. The acetabulum was carefully scraped until the instrument disclosed bleeding bone structure. As soon as the dead structure had been separated from the living, the child rallied even faster than he had depreciated, and a month after the operation, the patient could be removed to his home. A year has since passed by. He has been as healthy and as sprightly as a lark. The wound

has long since firmly cicatrized, and half a dozen fistulous tracts have likewise closed. The present weight of the child is enhanced by thirty pounds; the former vigor has returned; the joint allows no inconsiderable motion in every direction, and defect in the length of the extremity is not great.

Up to a certain date, the patient has used crutches, the splint of Mr. Owen Hugh Thomas, of Liverpool, which exceeds, in its utility, all other mechanical means and measures, and had his extremity suspended by the other being mechanically raised. Lately, however, we have made an attempt at using the extremity for locomotion, without artifice, and have thus far received no rebuke. Fig. 2 illustrates the present status of the patient, from which the normal position of both pelvis and left extremity may be readily deduced.



FIG. 2.

During the last five years, we have performed but three exsections of the hip-joint, which, like the last, were unavoidable. The treatment of coxitis has been so materially improved, and rendered effective, that the contingency of exsection does not occur as frequently as in former years, particularly if the cases are submitted to proper treatment at an earlier stage.

FRACTURE OF THE NECK OF THE SCAPULA.

The last case is of more than ordinary interest. The right shoulder appears, on comparing with the left, flatter, the deltoid muscle being wasted, or, as it were, stretched, and below its insertion at the

humerus there is a deep and longer fold, or furrow, different in direction, length and depth on the opposite side. In measuring the distance of either shoulder from the spine, we notice that the right approximates more by about one inch, much more readily noticed in the gentleman than in the illustration. This change in the symmetry of the person was brought on by a fall, either upon or with the shoulder against some prominent object. The physicians called pronounced the case dislocation of the shoulder, with which its symptoms corresponded, reduced it by the ordinary methods, bandaged the arm to the chest, and kept the hand in a sling. Strange to say, the patient did not feel relieved; but on the contrary, the pain increased steadily along the brachial plexus. When, at last, the restraint was removed, the patient was unable to use the arm. Every attempt was accompanied by intensified pain, and even when at rest the extremity felt numb, and exhibited a different temperature. These symptoms had not perceptibly changed in six months, when the patient consulted us about his case. The symptoms indicated pressure upon the brachial plexus. The axillary cavity was materially diminished by swelling and intumescence; but no foreign substance could be discerned. The deltoid muscle is flat, and the acromion somewhat prominent; but the joint is intact, and moves normally, of course under pain; the extremity is, moreover, attenuated and almost powerless.

Now, it is evident that such symptoms do not follow a promptly reduced simple dislocation. We, at least, have never observed them, nor have others. Yet, we have no doubt that the physicians in attendance had palpable evidence of dislocation. Now, the question arises: "What anatomical derangement exhibits the same signs with dislocation, without its being the same? We can find no other than *fracture of the surgical neck of the glenoid cavity of the scapula*. In this fracture, the entire joint drops, and thus presents the exact symptoms of dislocation of the humerus into the axillary space, etc., viz.: Prominence and apparent protrusion of acromion; depression below the same; filling of the axilla by the head of the humerus and glenoid cavity; loss of function and pain. Very few surgeons think of anything else under such circumstances, and relieve the displacement. They are rather surprised at the speedy reduction, but give no heed to it; but when the pain persists, they gradually grow skeptical as to the correctness of their diagnosis. We have, ourselves, passed through this ordeal, and have learned by disappointment and sad experience, to be more careful in our diagnosis of dislocation. This candid admission of our own error will protect us against the suspicion of sinister intrusion. It is with a view of aiding our fellow-practitioner in the correct diagnosis, that we refer to this subject. Some surgeons have never met

with a fracture of scapula at its surgical neck, and naturally enough, deny their occurrence in toto. They are, indeed, rare; and when occurring, may be mistaken for dislocation. We had, altogether, four cases, including the present one. In one, we failed in the diagnosis, and when, at last, the actual truth dawned upon us, it was as in the present case, too late for correction. In two cases, we recognized the nature of the injury, and averted the otherwise inevitable consequences.—*Medical Brief.*

THE ONTARIO BOARD OF HEALTH.—The new Provincial Board of Health has already shown itself in earnest. It has issued a series of notices to municipalities and public bodies calling attention to its own and to their powers in health matters. It has circulated amongst school-teachers, ministers of religion, and others, very valuable advice on the prevention of epidemic disease, and it has asked for information from the various authorities as to the existence within their respective districts of by-laws as to the position and construction and position of wells, privies, water-closets, drains, etc., as to scavenging and other matters. So desirous is the Board of acquiring all available information as to disease prevalence, that it has prepared a series of cards on which medical practitioners are asked week by week to fill in the sickness records of their practices together with certain other information. This information, like that relating to infectious disease, will, it is evidently expected, be given without any fee, and we are bound to confess that in this respect the Board is expecting too much of the medical profession. That the information asked for is wanted in the interests of public health we do not for one moment doubt; indeed the lack of proper sickness returns is now universally recognized as a serious want in connexion with sanitary administration. But a public want should be met out of the public funds, and it is clearly unreasonable to ask that members of a busy profession should at the sacrifice of much valuable time, and without any fee or reward, supply a public body with information which will need to be carefully compiled. In England, medical officers holding Poor-law appointments are required, in virtue of their official position, to supply such information, but it has never been as much as suggested that a similar demand should be made of private practitioners. Indeed we know of no other profession to whom any such request would be made. One other very important initial step has been taken by the Provincial Board. It has deputed Dr. Covernton to visit this and other European countries with a view of learning the experience of the older established State Boards of Health. Dr. Covernton has spent some time in this country; he will attend

the International Congress of Hygiene at Geneva in his official capacity, and it is evident that he will carry back with him abundant materials for aiding his Board to arrive at decisions with regard to their future course of action. It would be well if our own Central Health Authority were in this respect to follow in the wake of the new Canadian Board. The experience of other countries, and especially that of some of the National Boards of Health of the United States, would, if it were acquired and properly compiled by skilled officers with a view to its being made use of in this country, afford in many respects most valuable aid to efficient sanitary administration.—*The Lancet.*

RESECTION OF THE HIP-JOINT.—Mr. George Cowell reported at the meeting of the Section of Surgery of the British Medical Association his experience in sixty-five cases of excision of the hip, in which his percentage of deaths amounted to ten per cent. His conclusions are:

1. Resection should be restricted to cases where there is distinct grating in the joint, accompanied by either pain or profuse suppuration, or failure of health.
2. It should be performed without loss of time, as soon as these conditions are recognized.
3. It is inadmissible in patients over eighteen years of age. All three of my older patients died with more or less prolonged suppuration, and without the slightest attempt at repair. I have never seen an adult patient recover from excision of the hip.
4. The younger the patient (my youngest patient was three and a half) the more satisfactory the result, and the more rapid the repair.

He now performs the operation antiseptically, and always removes the great trochanter with the head of the bone. By not postponing the operation, the acetabular mischief is usually slight. Both ends of the wound are closed with two silver sutures, a tube being inserted so as to keep the centre of the wound, opposite the acetabulum, open. He prefers Bryant's splint, and fixes the limb operated upon one inch shorter than the other. This extension is a matter of great importance, as he is convinced that the muscular contraction forcing the shaft of the femur against some part of the acetabulum is a frequent source of subsequent failure, and of undeserved discredit of the operation. In the last few cases, when possible, he has placed the children for the first few weeks in the prone position (face downwards), so as to avoid soaking the bandages with urine. He has tried this plan for too short a time to express any positive opinion with regard to it; but it answers its purpose exceedingly well, and is marvellously tolerated by the little patients.—*British Medical Journal*, August 26, 1882.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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TORONTO, NOVEMBER, 1882.

The LANCET has the largest circulation of any Medical Journal in Canada.

CANADA MEDICAL ASSOCIATION.

In an article in the October number of the *Canada Medical & Surgical Journal*, our contemporary, after taking credit to itself for having "always advocated the necessity of maintaining this society in an efficient condition, and rendering it thoroughly representative of medical progress throughout all sections of our country," affects great surprise that the LANCET "in its last issue uses expressions equivalent to saying that, up to the present time, the Association has been governed by those belonging to McGill College." Our contemporary has entirely misunderstood our meaning and misquoted our language; we never gave utterance to any such statement as the above quotation would seem to imply. What we did say was, "that owing to a feeling, *with which we have no sympathy whatever*, that the Association is being manipulated by McGill professors and their friends, the majority deemed it wiser to meet in Kingston," and concluded by expressing the hope that under Dr. Osler's skilful management the number of members would soon be doubled or even trebled—when it would have so outgrown its present proportions that it could no longer be said to be under the wing of McGill or any other college.

We venture to say that our contemporary will not deny that such a feeling as above alluded to, unfortunately does exist among certain members of the Association, and that it found public expression in the discussion that took place in regard to the next place of meeting. We yield to no one in our loyalty to the Association, or in our desire to

promote its highest interests and maintain it in an efficient condition, and would refer the reader to the past volumes of the LANCET in regard to our attitude in relation to it. But we are not deaf to the fact, much as we deplore it, that not a few have remarked, from time to time, that the Association was "run by McGill men," as it was tersely expressed. There can be no question "that, for several years past, Montreal men, and those connected with McGill especially, have been diligent in their attendance and have taken an active part in the proceedings;" and it is greatly to their credit that they have done so. They have performed what they considered a public duty, and we agree with our contemporary "that they should not be subjected to remarks calculated to render them so misunderstood as actually to appear to desire to control the Society in any way." We would also take this opportunity of saying that there is very little danger of the action of McGill College being misunderstood so long as no tangible ground is left for their opponents to base an accusation upon, and that no comments in the LANCET or any other journal can give existence to a feeling which is not founded upon fact. As we have already said, we have no sympathy whatever with the feeling expressed at the recent meeting. We do not believe that the McGill professors or their friends have any desire to control the Association but, in their zeal for its welfare, they may possibly, sometimes forget what is due to others who are equally interested in its prosperity, and thus their actions may be liable to be misconstrued. If we were disposed to be captious, we might, for example, point out that our contemporary, in its commendable zeal for the welfare of the Association, has taken upon itself, unsolicited, and without the sanction of the printing committee, the self-imposed task of printing the most important papers read at the recent meeting. These papers are the property of the Association, and are at the disposal of the printing committee; but this committee was never consulted, so far as we are aware, in regard to the disposition of the papers. Now, this may be zeal, but it is not discretion, and some one, "not well informed," might be imprudent enough to say that because our contemporary publishes the papers read at the meeting, it aspires to become the organ of the Association; and might give currency to the remark that not only were McGill professors endeavoring to

control the Association, but were also trying to make their "organ" the organ of the Canada Medical Association.

We also find our contemporary, of this city, with its usual bumptiousness, again obtruding its opinions *ex cathedra*, in the name of the profession of Ontario, "for whom we profess to speak." It seems anxious to pursue its congenial work of stirring up jealousy between rival schools. We repudiate entirely the insinuation that there is any jealousy between Trinity and McGill College; and so far as the Association is concerned, Trinity Medical College has not been disposed to hold itself aloof from contributing to its advancement. We would also take this opportunity of saying that whatever view may be taken of the statements in the LANCET, it is a gratuitous assumption to maintain that Trinity Medical College is in any way responsible for them.

TORONTO MEDICAL SCHOOLS.

The two Medical Schools in Toronto were reopened for the winter session on the 2nd and 3rd ult. The opening lecture of the session in Trinity Medical College, was this year delivered by Dr. Grasett, Professor of Medical Jurisprudence and Toxicology. After the usual preliminaries the lecturer gave a succinct account of the history of the school, tracing its lineal descent from the old Medical Faculty of Trinity University, and referred in eulogistic terms to some of the old professors, long since gone over to the majority, viz., Drs. Bovell, Hodder and Beaumont. He also alluded to the fact that medical science had advanced so much in a few short years, that while seven professors were sufficient then, thirteen are now required to do the work. A good general education was, he said, a prime qualification for the student, and all who could afford it, should avail themselves of a college course before commencing the study of medicine. He also advocated the establishment of a three month's course in the summer, for the study of the minor branches. He alluded to the appointment of an additional demonstrator of Anatomy (Dr. Teskey), and congratulated the Faculty on the selection of the lecturer on Physiology (Dr. Sheard), who had made this subject a special study. He emphasized the importance of

clinical work at the Hospital, and paid a high compliment to the Board of management of that Institution for its efficiency and its facilities for affording clinical instruction. He inculcated self-culture, and careful observation, citing as an incentive such examples as Jenner, Galvani, and others. He also cautioned them against the evil of intemperance, and defended them from the unkind aspersions sometimes cast upon them. In the practice of their profession he counselled diligence, industry, honesty of purpose, and correct habits, and especially the cultivation of sympathy for their patients. He concluded an excellent lecture by reminding them that they must not expect too much at first, but be content to toil on, and success would ultimately crown their efforts.

In the Toronto School of Medicine a new departure was inaugurated by the delivery of an opening lecture by Dr. Barrett. We have not space to do anything like justice to his address. The lecturer began by welcoming the students and friends who honored them with their presence. He then alluded to the high calling of the profession they were about to enter, and reminded them that wealth was almost unknown to those in the ranks of the medical profession, but a competency might be confidently looked forward to. Yet it had its allurements; these were the privileges of relieving suffering and of saving life. In the pursuit of the profession many opportunities were afforded for the manifestation of that mercy that is "twice blessed." He next spoke of the requirements necessary for those who embark in the study of the healing art. These were, a desire for knowledge for its own sake, mental culture, a high sense of morality, and the true instincts of a gentleman. He then passed in review as ensamples the lives and works of such men as Harvey, Wm. and John Hunter, Jenner and Simpson, and concluded a most eloquent address in the following words:—"You cannot have failed to notice that the prime discoveries thus hastily brought before you, viz., the circulation of the blood by Harvey, the greatly extended knowledge of anatomy by William Hunter, the ligation of arteries by John Hunter, the protective power of vaccination by Jenner, the use of anæsthetics by Professor Simpson, have all been achieved by sons of Britain. Surely as Englishmen, and the descendants of Englishmen, we may take a just pride in the honors gained by our an-

cestors, and may further trust in the belief that the energies, industries, and mental powers possessed by them have not been lessened in her sons simply by the fact of our having transplanted England's institutions, her laws, and her language to this western continent.

McGILL MEDICAL COLLEGE SEMI-CENTENNIAL.

The fiftieth anniversary of McGill College, Montreal, was celebrated on the 4th and 5th ult. by a *conversazione* and grand banquet tendered by the Dean and members of the Faculty to the graduates and friends of the Institution. The *conversazione* was held in the Redpath Museum, and was the occasion of the opening of the winter session of the Medical School. The grounds were brilliantly illuminated with Chinese lanterns, and the Museum and Lecture Hall were filled to overflowing with the youth and beauty of the city. The chair was occupied by the Hon. Charles Day, and beside him, the Hon. the Lieut.-Governor of Quebec—Dr. Robitaille, Principal Dawson and Ven. Archdeacon Leach. The opening address was delivered by the Dean, Dr. R. P. Howard, in which he entered upon a review of the Faculty since its inception fifty years ago. He sketched the lives of the four men who were the founders of medical teaching in Montreal, viz., Dr. Andrew Holmes, Dr. John Stephenson, Dr. William Robertson, and Dr. William Caldwell, and also paid a fitting and eloquent tribute to the memory of the late lamented Dean, Dr. Geo. W. Campbell. He concluded his very able lecture with a reference to the success which had been attained by the graduates of the College, and spoke of the needs of the Faculty, such as enlargement of the building, increased accommodation for the medical library, etc. He suggested the establishment of a fund in memory of the late Dean, to be called the "Campbell Memorial Fund," as a graceful tribute to the memory of a good man and an able physician.

The audience then repaired to the upper hall, and the *conversazione* opened. It was a most brilliant reunion, all the professions being fully represented.

The banquet which took place the following evening at the Windsor Hotel, was the crowning event

of the occasion. About 200 guests were present. Dr. R. P. Howard occupied the chair, while the vice-chairmen at the six smaller tables were Dr. Gardner, Dr. Roddick, Dr. Osler, Dr. Ross, Dr. Girdwood and Dr. Hingston. On either side of the chairman were his Honor, Dr. Robitaille, Lieut.-Governor of the Province, and Principal Dawson. Besides these, there were seated at the principal table representatives from all the leading Colleges in Canada, and many other prominent individuals. During the evening the 65th band added to the pleasures of the occasion by performing choice selections of music.

After the *menu* had been thoroughly canvassed the chairman called the meeting to order, and Dr. Osler, the Secretary, stated that he had received a number of letters and telegrams expressing regret that the senders could not be present.

Messages of congratulation were received by telegram from the College of Physicians and Surgeons of Chicago, and from the Professors and Students of Trinity Medical College, Toronto. The latter especially was received with the most enthusiastic applause. The usual loyal and sentimental toasts were then proposed and enthusiastically received. The toast of the "Lieut.-Governor" was responded to by his Honor, Dr. Robitaille, who is a graduate of the College; "The Principal of the University" by Dr. Dawson, the "Sister Universities" by Dr. Chadwick, for Harvard; Dr. Buckham, for Vermont University; Dr. Rottot, for Laval; Dr. F. W. Campbell, for Bishop's University; Dr. Workman, for the Old Medical School of Toronto; Dr. D'Orsennes, for Victoria Medical School, and Dr. Covernton, for Trinity Medical College, Toronto. "Our Graduates" was ably responded to by Dr. Grant, of Ottawa. "Our Sister Professors." "The Medical Faculty of McGill." "The Four Founders." "The Montreal Hospital," etc., completed the list of toasts, and a very pleasant entertainment was brought to a close.

We congratulate the Faculty of McGill College upon the substantial evidence of success which has attended their labors in the past, also upon the eclat of their semi-centennial celebration, and heartily wish them a still greater degree of prosperity and usefulness in the second half century upon which they have entered.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.

—The semi-annual meeting of this College was held in Quebec on the 27th of September. Dr. R. P. Howard, of Montreal, President, in the Chair. There was a large attendance of governors present. After reading the minutes of last meeting, a resolution was passed respecting the death of Dr. Geo. W. Campbell, one of the original members of the College. The following gentlemen were admitted to the study of medicine:—J. H. Darey, L. V. Benoit, A. Kinloch, H. Hervieux, J. D. Fontaine, L. S. P. Normand, P. W. Garneau, A. Mallett, J. Legault, A. St. Amour, A. Laval, D. McNamara, G. B. Tanguay.

The application of Dr. Keyes, of Georgeville. Que. for registration was refused, on account of his being an Eclectic.

The following graduates received the licence of the College:—Drs. A. Herbert, E. Laberge, J. V. Côté, G. A. Casgrain, T. W. Mills, W. DeMouli-
pied, C. O. Brown, and L. J. Lennox.

Certain statements having been current to the effect that private examinations were given by professors of a medical school in the Province of Quebec, recognized by the College, and that on these examinations certificates were issued purporting that the bearers were entitled to a diploma, and were, in fact, medical practitioners, a committee was appointed to make an investigation into these statements, and report at the next meeting of the Board. The reports of the Treasurer, and the Detective Officer were received, and a new medical tariff was submitted.

ONTARIO BOARD OF HEALTH MAP.—We have received weekly editions of a map published by the Ontario Board of Health. In this map the Province is parcelled out for purposes of comparison into ten districts, represented in different colors, the comparisons being based upon differences in geological formation and meteorological conditions. The names of the diseases and their degree of prevalence in the different districts are given in printed spaces. For our own part we do not see the necessity of issuing weekly editions of this map. It is very well in its way for reference, but a weekly issue is certainly a most useless and extravagant waste of money. The information given is necessarily of the most meagre description, being chiefly confined to an enumeration of six of

the most prevalent diseases in each district. It would be infinitely better and cheaper, to issue printed slips every week giving more complete information in regard to prevalent diseases. It is deeply to be deplored, that while there appears to be plenty of funds for the publication of weekly maps, there is not a farthing to expend for the information received from the members of the medical profession, without which data, the map would be of no service whatever—a mere daub of colors without either geographical correctness or artistic beauty.

A WELL-MERITED RECOGNITION.—The following address was presented to our esteemed confrère and fellow citizen, Dr. Workman, by the Medico-Chirurgical Society of Montreal, at a meeting held on the 6th of October, 1882.

DR. JOSEPH WORKMAN,

SIR,—The members of the Medico-Chirurgical Society of Montreal, in session this evening, cannot allow the opportunity to pass of expressing to you the pleasure your visit has been to them. They feel that to you the Medical Societies of Canada owe much; your zeal and ability having always been liberally expended in promoting their welfare, and they desire to express the hope that you may be spared for many years to give them the benefit of your wisdom and counsel.

A. HENDERSON, M.D.,

GEO. ROSS, M.D.

Secretary.

President.

We congratulate the Dr. upon this substantial token of recognition of his valuable services in the direction indicated, and heartily join in wishing him long life, and much happiness in his labor for the benefit of the profession.

PERSONAL.—Dr. Phelan, of Kingston, is about to visit the hospitals of Europe to further pursue his medical studies. He expects to be absent about a year. It will also be seen by reference to the Report of the Huron Medical Association, that our friend Dr. Stewart, of Brucefield, is going to Vienna to spend some time in professional pursuits. We commend the action of these gentlemen to all who have the means and leisure to avail themselves of so agreeable and beneficial a holiday trip. There is much valuable information to be gained by an occasional trip to the old world.

Mr. J. Knowsley Thornton, of London, Eng., the ovariectomist, was in Toronto during the first week of October, and was present at the opening lecture of Trinity Medical College.

We are glad to be able to announce that Dr. J. C. Tache, Deputy-Minister of Agriculture, who was seriously injured in March last, is again able to be about. It is said he contemplates withdrawing from the service shortly.

We are also pleased to learn that the Hon. Dr. De St. George, of Quebec, has so far recovered from his serious illness as to be able to resume his practice.

Dr. M. Sullivan, of Kingston, is mentioned as the probable successor to the late Hon. John Hamilton, senator of the Dominion of Canada.

MALPRACTICE SUIT.—Some time ago we stated in these columns that a malpractice suit had been instituted against Prof. McLean, of Ann Arbor, by one of his patients. This case was tried recently at the United States Court in Detroit, Mich. The Plaintiff, a Mrs. Hayes, consulted the Dr. for the cure of a recto-vaginal fistula. He advised and performed the operation of incision, as in fistula in ano, but the parts did not unite, and subsequent operations to restore the perineum also failed, owing to the bad health of the patient. Three experts were called to testify on each side, and, as is too frequently the case, each took a one-sided view of the question. The judge, in his charge, said that notwithstanding the defendant had promised to cure his patient, he could not be held accountable for failure, as the law did not recognize a promise to cure. He could only be held accountable for ordinary skill. The jury disagreed, eight being for the defendant, and four for the plaintiff. Dr. McLean, in this case, had the active support and sympathy of the most eminent medical men in Detroit. His many friends in Canada will also be pleased to hear of his verdict of acquittal.

HORSFORD'S ACID PHOSPHATE.—This Acid Phosphate recommends itself to the profession, particularly in all cases arising from a debilitated condition of the system in nervous diseases, and where the waste of the phosphates is greater than the supply. The importance of such a remedy to the profession has been clearly established by such competent authorities as Prof. Wm. A. Hammond,

Drs. Fordyce Barker, W. H. Van Buren and others. Prof. R. Ogden Doremus states that the greater proportion of phosphates in urine after excessive mental labor has been clearly established by chemical analysis, and to repair this waste Dr. Hammond affirms that he habitually uses phosphoric acid and the phosphates. There are few preparations that perform the work more thoroughly, and at the same time are so pleasant in administration as the Acid Phosphate.

THORACO-PLASTIC OPERATION.—Dr. Fenger, of Chicago (*Med. News*), has recently performed Estlander's operation of exsection of some of the ribs, to allow of collapse of the chest-walls in a case of empyema. The patient, a girl 16 years of age, had suffered from empyema for three years, and there remained a fistulous opening which refused to heal. The empyema cavity was two inches long, one and a-half inches high and about an inch deep. The 4th, 5th and 6th ribs were removed opposite this cavity to the extent of six centimetres in length. This permitted of closure of the cavity and the patient made a good recovery.

TURPETH MINERAL IN CROUP.—The use of the yellow sulphate of mercury (Turpeth Mineral) in cases of inflammatory croup has come to be regarded as the most satisfactory remedy yet employed in this affection, especially when administered early. Dr. Fordyce Barker, of New York, insists upon the early administration of the drug, and states that for twenty years past he has not lost a case when seen sufficiently early—in the incipency of the attack. He advises the families of which he is the medical attendant, to keep Turpeth Mineral powders in three grain doses always at hand, and to give one as soon as the earliest symptoms manifest themselves.

TENDON REFLEX IN LOCOMOTOR ATAXIA.—Dr. James Leslie, of Hamilton, Ontario, gives an account (*N.Y. Med. Record*) of a case of locomotor ataxia in which the patellar tendon-reflex was very distinct. The patient was a shoemaker, aged 45 years. There were no fulgurating pains, but the symptoms of inco-ordination without loss of muscular power were well marked. Daily forcible flexion of the thighs upon the abdomen was attended with much benefit.

PERMIT TO PRACTICE IN ONTARIO.—A correspondent asks "if the President of the College of Physicians and Surgeons of Ontario can give a permit to practice medicine to one who is not registered either in Great Britain or Ontario." In reply we would say that former Presidents have granted permits in certain cases, but the legality of such may be called in question. There does not appear to be any power given in the Act to grant permits, and so far as we are aware, the present incumbent has not granted any.

REMOVAL WITHOUT CAUSE.—We regret very much to learn of the removal of Dr. F. P. Taylor from the position of surgeon to the Marine Hospital, Charlottetown, P. E. I. Dr. Taylor has been for nine years surgeon to this institution and was a most competent and economical officer. His removal was occasioned by some change in the Governmental arrangements in regard to the Hospital, and casts no reflection upon the Dr.'s efficiency or qualification for the position.

E PLURIBUS UNUM.—A Chicago physician recently delivered a woman of a fine healthy baby. The mother was on her way from Boston to her home in St. Louis when she was taken ill. In the form for return of births enforced by the board of vital statistics for Illinois, the physician is required to state who is the father of the child. This it appears was a puzzler for both mother and physician, but the latter satisfied his conscientious scruples by filling in the blank with *E pluribus unum*.

TORONTO HOSPITAL IMPROVEMENTS.—A new convalescent department is now in course of erection in the grounds of the Toronto General Hospital. The building is two storeys in height with a large verandah on the south, and a conservatory on the west side. This addition has been in contemplation by Dr. O'Reilly for some time past, and mainly through his efforts the funds have been secured from private citizens. We congratulate the worthy Superintendent upon the success which has attended his efforts.

INSUFFICIENTLY PREPAID.—Mr. Hazen Morse of this city, desires us to state that through some misunderstanding, a number of circulars were mailed to members of the profession which were insufficiently prepaid. He regrets very much that

this occurred, and begs to apologize for having caused annoyance and unnecessary expense, to those to whom the circulars were addressed. It is needless to say that it was entirely unintentional on his part.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.—At the annual meeting of the above-named Society, held on the 6th ult., the following gentlemen were elected officers for the ensuing year: *President*, Dr. R. A. Kennedy; *1st Vice*, Dr. T. G. Roddick; *2nd Vice*, Dr. T. A. Rodger; *Secretary*, Dr. Henderson; *Treasurer*, Dr. W. A. Molson; *Librarian*, Dr. D. F. Gurd; *Council*, Drs. F. W. Campbell, Osler and Geo. Ross.

THE LONDON MEDICAL COLLEGE.—The newly established Medical Department of the Western University of London, Ontario, opened its first session on the 2nd ult. The attendance of students though not large is considered satisfactory as a commencement. Fifteen students enrolled themselves at the opening and the number is probably increased by this time to 20 or 25.

REMOVAL.—Dr. Henry Harkin, of Guelph, Ont., has removed to Montreal, to enter upon practice. Before leaving he received a handsome testimonial from his many friends in Guelph.

Dr. W. Young has returned to Montreal, Que., after a residence of several years in Hong Kong.

Dr. C. M. Stevenson has removed from Barnston to Coaticook, Que.

APPOINTMENTS.—Dr. R. P. Howard has been appointed Dean of the Medical Faculty of McGill College, Montreal. We congratulate the Dr. upon his elevation to the highest office in the Faculty.

W. D. Morrison Bell, M.D., of Ottawa, has been appointed assistant surgeon to the Governor General's Foot Guards, *vice* Dr. W. R. Bell, who was recently appointed surgeon to the Ottawa Field Battery.

Dr. F. W. Campbell has been elected acting Dean of the Medical Faculty of Bishop's College.

Dr. J. Leslie Foley has been appointed attending physician to the Montreal Dispensary.

CORONERS.—Andrew Grant, M.D., of Beaverton, Ont., has been appointed Coroner for the Co. of Ontario. Dr. Gray, of Perth, Ont., has been appointed Coroner for the Co. of Renfrew.

DEMISE OF THE U. S. HEALTH BULLETIN.—The *National Health Bulletin* of the United States has been discontinued, Congress having refused to grant the appropriation needed to defray its expenses. In future *The Sanitary Engineer*, New York, will print weekly, the information heretofore published in the *Bulletin*.

A RARE CASE.—Dr. Hingston, of Montreal, recently removed an ovarian tumor from a child two years of age. Such cases are sufficiently rare to render them most interesting from a professional point of view. The little patient was doing well at last account.

It is rumored that Dr. Lett, Assistant Physician to the Insane Asylum, Toronto, and Mr. Langmuir, formerly Inspector of Asylums for Ontario, are about to establish a private asylum for insane in Guelph, Ont.

The death of Mr. J. T. Clover, F.R.C.S., of anæsthetic fame is announced in our British exchanges.

Dr. Oliver Wendell Holmes is about to resign the professorship of anatomy in Harvard Medical College, which he has so long adorned.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY for November, 1882. New York: D. Appleton & Co. Fifty cents per number, \$5 per year.

The number of this popular Magazine for November is to hand. Dr. Frank H. Hamilton opens with a valuable article on the important subject of "Sewer Gas." He says, "What has been called 'sewer-gas' is composed of air, vapor, and gases in constantly varying proportions, together with living germs—vegetable and animal—and minute particles of putrescent matter." He indicates the only safe ground to take in regard to it, and quotes Dr. Willard Parker, as saying, "if he were to build a house, he would not have it connected in any way with a sewer but would construct a sort of annex into which he would gather all the pipes and fixtures, water-closets, baths, and wash-basins." The following excellent papers will also be found in this number—Professor Du Bois-Reymond, on

"The Science of the Present Period"; Dr. Nathan Allen on "The Law of Human Increase"; "Science in Relation to the Arts," an address by Dr. Siemens, President of the British Association for the Advancement of Science; Dr. Oswald's second paper on "Physiognomic Curiosities"; "Scientific Farming at Rothamsted," by Dr. Manly Miles; "Who was Primitive Man?" by Prof. Grant Allen, and several others of equal interest.

ON SLIGHT AILMENTS, THEIR NATURE AND TREATMENT, by Lionel S. Beale, M.B., F.R.S., King's College, London. Second edition, enlarged and illustrated. Philadelphia: P. Blakiston, Son & Co. Toronto: N. Ure & Co. Price \$1.35.

This new revised edition is published simultaneously with the London edition. The author in his introductory chapter on tact and treatment, gives his readers a very good article on quackery and medical humbug, in which he points out the proper conduct of the intelligent and honest physician in the face of such opposition. He specially emphasizes the importance of paying careful attention to the slight ailments, the treatment of which should be conducted on the same principles as that of serious diseases. The author gives many useful hints and directions in the treatment of ailments of every day occurrence, that are not to be found in the ordinary text books. We cordially commend the work to our readers, feeling certain they will be pleased and benefited by a perusal of its contents.

THE INDEX CATALOGUE of the Library of the Surgeon-General's Office. Vol. III. Washington: Government Printing Office.

This volume, which is uniform in size and appearance with its predecessors, brings down the alphabet through D. It contains 9,043 author titles, 8,572 book titles, 28,846 journal articles, and 4,335 portraits under the heading of collection of portraits. One of the most striking features of the volume is the very large number of pages covered by the subject of Asiatic cholera—148 pages. Cinchona and its derivations cover five pages and a-half. The labor entailed upon the preparation of these volumes is something enormous.

JOURNAL OF CUTANEOUS AND VENEREAL DISEASES. Issued monthly at \$2.50 per annum. Edited by Henry G. Piffard, A.M., M.D., and P. A. Morrow, A.B., M.D. New York: Wm. Wood & Co., publishers.

We have just received the first number of this new and interesting periodical. It gives promise of great usefulness and value. The present number contains 32 pages of reading matter of excellent character and variety. Among other articles may be mentioned an interesting case of Trichophytosis Cruris, by Geo. H. Fox, M.D., accompanied by a beautifully executed colored plate, illustrating the case in question.

NITRO-GLYCERINE AS A REMEDY FOR ANGINA PECTORIS. By Wm. Murrell, M.D., M.R.C.P. Lond.; Lecturer on Materia Medica, etc., at the Westminster Hospital, London, Eng. Detroit: Geo. S. Davis, Medical Publisher.

The object of this work is to give directions for the administration of nitro-glycerine as a remedy for angina pectoris. The principal points are illustrated by reference to cases under the author's care. Some of these cases have already been published in the London *Lancet*.

A PRACTICAL LABORATORY COURSE IN MEDICAL CHEMISTRY. By John C. Draper, M.D., LL.D., Prof. of Chemistry in the University of New York. W. Wood & Co., publishers.

This little volume will be found exceedingly useful and convenient for the student of practical chemistry. It is so arranged as to be useful also as a note book, having every alternate page blank for this purpose. All the various tests for organic and inorganic poisons and animal fluids are given in full, also those for the examination of impurities in water, milk, etc., besides a section on sediments and calculi. It is of convenient size for carrying in the pocket.

THE PHYSICIAN'S VISITING LIST FOR 1883. (Lindsay & Blackiston,) 32nd year of publication. Philadelphia: P. Blackiston, Son & Co.

We gladly welcome the new edition of this Visiting List. It has been before the profession for nearly a third of a century, and notwithstanding the issue of a number of works of a similar character, it still holds its ground as a convenient and useful pocket companion. It has many imitators, and but few, if any, superiors.

TRANSACTIONS ON THE AMERICAN GYNECOLOGICAL SOCIETY. Volume VI. for the year 1881. Philadelphia: Henry C. Lea's Son & Co., 1882.

This volume of 542 pages is a most substantial work, and attests the high status of gynecology in America. It contains nineteen excellent papers, with accompanying discussions, and an index to the gynecological literature of all countries for 1880. We commend it to our readers.

A MARVEL OF SURGERY.—Dr. Roswell Park, writes from Prague: I have had the pleasure of a rather extended interview with a patient whose larynx and epiglottis Prof. Gussenbauer removed over two years ago. Six weeks after the operation, he began to wear part of the artificial larynx, and, after accustoming himself to this, he gradually learned how to introduce and use the reed which takes the place of the vocal cords. This apparatus was made for him by Rothe, who has also done some work for the Reese Hospital. The patient is a riding teacher, is reputed the best rider in Prague, is busy from morning to night, talking all day, and suffers not the slightest inconvenience or pain. His voice is, of course, very monotonous, but his enunciation is excellent, his speech perfectly intelligible, and he eats and drinks with perfect facility. Three intralaryngeal operations had been previously made, before Gussenbauer attempted his feat. This case is said to be the best living example of what the art of the surgeon and the mechanic can accomplish for such a terrible disease as cancer of the larynx.—*British Medical Journal*.

A century ago John Hunter divided all skin diseases into three classes; one of which is cured by mercury and the iodides, a second by sulphur, and a third class which the devil himself can't cure. Dr. L. P. Yandell, who quotes Hunter as above, is given credit for a much less complex classification than even this. He attributes all skin eruptions to malaria. Quinine is a specific for malaria, ergo, quinine is the remedy for all skin eruptions.—*Q. E. D. —Michigan Med. News.*

The Sultan of Turkey has given a site in Jerusalem for the purpose of erecting a hospice and ophthalmic dispensary, under the auspices of the English branch of the Order of St. John.

Births, Marriages and Deaths.

In St. John, N.B., on the 9th ult., W. F. Coleman, M.D., to Mary Winniett, youngest daughter of the late J. Hammond Hirtt, Barrister-at-Law.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,
CRITICISM AND NEWS.

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Original Communications.

QUINQUINIA VS. QUININE AS AN ANTI-PERIODIC.

BY G. T. MCKEOUGH, M.B., M.R.C.S.ENG.; L.R.C.P.ED.;
F.O.S.LOND.; CHATHAM, ONT.

Quinquinia is a preparation said to contain 15 per cent. of quinine, the remainder of the preparation consisting of the other alkaloids of cinchona bark in their natural combination: quinidia averaging 15 per cent., cinchonidia 15 per cent., cinchona 25 per cent., chinoidine 30 per cent., and for which is claimed therapeutical properties equal to quinine, "grain for grain," with certain material advantages, viz.: the absence of symptoms of quinine during its administration, and the cheapness of the drug as compared with quinine. The specimen of the preparation which my partner Dr. Holmes received, has been administered by us to twelve patients. A short record of the results I thought might be interesting to the profession, especially to those practising in malarious districts who have not as yet given it a trial.

No. I. F. W., male, aged 44. Had general malaise with loss of appetite and high colored urine for several days, but continued following his usual occupation until the morning of the fourth day of his not feeling well, when he had a heavy chill followed by fever, headache and pains in his limbs and back; he was compelled to go to bed and sent to me for a bottle of ague medicine. I sent him twenty grains of quinquinia to be divided into ten powders and one to be taken every two hours, with a purge of rhubarb and calomel. On seeing him a few weeks afterwards he informed me that the medicine had cured him; that there had been no return of the ague; and he was glad I had "at last found a medicine that would cure ague without having any quinine in it," the quinquinia

not producing the usual symptoms of cinchonism which quinine always produced in his head to a marked degree.

In a malarious district one not infrequently meets with cases similar to this, in which without the administration of any anti-periodic there is no return of the paroxysm, the malarial poison seeming to be eliminated after a single attack, apparently spontaneously. This might have been such a case and no credit due to the quinquinia for the favorable termination of the disease.

No. II. Sept. 12th. A. M., female, aged 56. Has had tertian ague for a week past, in all, four paroxysms. Prescribed 30 grains of quinquinia—3 grains every two hours. She commenced to take the medicine at one o'clock upon the fourth apyrexial day of the attack, the fifth paroxysm was expected the following morning about ten o'clock, but she escaped it, the remedy having been taken regularly as directed. We could scarcely expect more from quinine, probably a smaller quantity would have produced the same result. The ague returned in a fortnight, when 30 grains of quinine were ordered and broke it, quinquinia not being obtainable, our supply having become exhausted. She had no return of malarious symptoms when last seen, one month after her last attack. Whether quinine has superior prophylactic properties to quinquinia in malaria, my experience with the drug is too limited to state. This case would favor quinine as giving greater immunity to subsequent expressions of malaria.

No. III. F. J. G., female, aged 37. Was seen on the evening of Sept. 13th; complained of chilliness with headache, particularly over the left brow, pains in the limbs, no appetite, languid and tired. Temp. 101° F., pulse 100. The day previous she was quite well. Ordered 30 grains of quinquinia—3 grains every two hours. When seen the following evening her symptoms had not improved; there was some relief from the pain during the morning, but it increased in severity during the afternoon. The quinquinia having all been taken and my experience being so limited with the preparation, I did not feel justified in continuing its use any further. Knowing that quinine would certainly restore the patient in a few days to health, 36 grains of sulphate of quinine were ordered and the patient was well in a couple of days. If I had had the same confidence in

quinquina as I had in quinine and continued its use, the patient might have recovered as rapidly under the entire use of quinquina, as it must be remembered that similar cases do sometimes require one drachm or more of quinine to effect a complete cure.

No. IV. Sept. 15th. F. D., female, aged 20. Two weeks ago had an attack of intermittent fever, for which she took 30 grains of quinine and recovered. Since then she has been taking liquor arsenicalis and liquor ferri dialyzati, partly for anæmia and partly as a prophylactic, having become somewhat anæmic from a succession of attacks of acute malaria. She has been feeling tolerably well since her last attack until this morning, when she lost her appetite, urine high colored, feeling of fatigue and languor, has chilly sensations. I saw her about 3 o'clock when 30 grains of quinquina were prescribed, to be taken in the course of the afternoon and night. She took the remedy faithfully, hoping to ward off the expected paroxysm but without the desired result, as the following morning she had a chill with fever and sent for some quinine, regretting very much that the other medicine did not cure her, as it did not make her "head ring and buzz" like quinine. She had no subsequent paroxysm after taking 30 grains of quinine.

No. V. J. T., aged 27, male. Tertian ague. The usual symptoms, together with a foul breath and thickly furred tongue. Ordered 30 grains of quinquina and a purgative. He returned to our office in three days, stating that he had had no return of the fever, but his appetite had not returned and he had a "bad taste in his mouth." He was ordered a mixture of rhubarb, bicarbonate of soda and infusion of colomba, and when I last saw him a few days ago, he informed me that he soon regained his usual health and had no return of ague.

No. VI. G. S., male, aged 30. Has had attacks of malaria all summer. Came to our office on the 20th of Sept., complaining of his bones aching, loss of appetite, fatigue and languor, inability to work, no rise of temperature. Gave him 30 grains of quinquina, and on the second day after commencing to take the prescription, he returned to work, feeling as well as usual.

No. VII. Sept. 27th. L., aged 11. Has been suffering from ordinary intermittent malarial symp-

toms for two days, with slight rise of temperature. Prescribed 20 grains of quinquina—2 grains every two hours, which produced some relief from the aching and slight lowering of temperature. The prescription was repeated and made a complete cure.

No. VIII. Sept. 27th. Mrs. R.'s baby, aged 2 years. Has had ague every alternate day during the past week. Ordered 10 grains of quinquina—1 grain every two hours. No return of ague.

No. IX. G. J., aged 60, male. Has had two paroxysms of quotidian ague. 30 grains of quinquina in four doses stopped the attack.

No. X. Sept. 29th. C. C., aged 32. Brown ague. Has had severe pains over his left brow every afternoon for the past four days. After taking 30 grains of quinquina there was no return of the pain.

No. XI. Sept. 30th. A. McC., aged 24. Has been suffering from remittent fever for several days. Has taken 2 grains of sulphate of quinine every two hours since the beginning of his illness, in all about $2\frac{1}{2}$ drachms. The symptoms of quinism having become so distressing to the patient, I omitted the quinine and substituted 2 grains of quinquina every two hours. He felt very grateful for the change, as "the deafness and buzzing in his ears" soon ceased. The fever abated on the second day after commencing to take the quinquina, the ninth day of the disease. It is difficult, if not impossible to determine the relative value of the two drugs in this case. I think it is doubtful if either the quinine or quinquina had much influence in arresting the disease, the case probably being one of those types of remittent fever, described long ago by Cleghorn in his work on the "Epidemic Diseases of Minorca," which terminate spontaneously on the ninth day.

No. XII. T. R., aged 19, male. Complained that every other day for a week his bones ached, felt greatly fatigued and it was with difficulty that he performed his usual manual labor. He had no chills and when I saw him on one of his sick days, there was no rise of temperature. 36 grains of quinquina—4 grains every three hours, restored him to health.

I think I may safely say that from the results of its use in the above cases, it merits further trial. As a tonic I have no experience with it, but as an

anti-periodic remedy, I doubt not it will prove as trustworthy and as reliable as quinine, "grain for grain." On the whole, its limited use in our hands has been satisfactory. That 30 grains of quinine will cure an attack of typical tertian or quotidian ague, there seems to be no doubt. Whether it will prove as useful in less typical and more obscure malarial affections, I do not know. One decided benefit it has over quinine is, the absence of any of the unpleasant symptoms of cinchonism in the quantities in which we prescribed it, an advantage which will assuredly be appreciated by the quinine taking public. As to the mode of administering it, the preparation being of a gritty sandy consistence, does not mix well with water, minute particles getting into the crevices of the teeth, causing the taste—which is intensely bitter—to be retained in the mouth for some time. If the patient can swallow a capsule or small wafer pellet, this will be found the preferable mode, otherwise rubbed up with pulv. acacia, elixir tarax. co. and syr. gaultheria, a not very unpalatable mixture is compounded. The remedy being apparently a useful one, especially so long as quinine remains as high priced as it is at present, it is to be hoped that the manufacturer will not permit of its adulteration.

DISLOCATION OF THE ELBOW.

BY W. S. CHRISTOE, M.D., FLESHERTON, ONT.

The article by Professor Dupuis on this subject, in your last issue, was, in my opinion, in keeping with the facts. He says: "The diagnosis of injuries of the elbow-joint are admittedly difficult. The complicated nature of the joint, the number of epiphyses about it, which may be separated from their bones, especially in childhood, and the swelling which generally so quickly supervenes, all conspire to obscure the real nature of the injury, and to leave the inexperienced surgeon in doubt as to the character of the lesion before him, and hence unable to pursue the proper line of treatment."

Such is really the experience of surgeons, who have cared sufficiently to note, and have been honest enough to declare them. I confess the diagnosis of lesions of this joint has been frequently most embarrassing in my own experience ;

it is not surprising then, that Professor Dupuis' sentiments command the heartiest endorsement. It brings forcibly to my mind some such cases ; in numbers, however, a country physician is placed at a disadvantage, as the population is sparse, and such accidents seldom occur.

Case I.—Was a young married man, whose elbow was dislocated, and from the history given of the case the lesion comprised displacement of both bones of the fore-arm. When the patient was seen by me, four weeks after its occurrence, the limb could not be flexed to permit the finger to touch the lip with whatever force. Upon examination, the ulna was properly adjusted, but the head of the radius upon flexion impinged on the anterior surface of the humerus. There was no doubt at all but what the proper means were used to reduce this dislocation and the ulna successfully reduced, but the radius had been inadvertently overlooked by the operator. With the use of anæsthetics and pulleys, it was remedied, but partially, and to this day there is an unpleasant embargo upon the free action of the joint. It taught a lesson, viz., hereafter to look sharply after all the members of the joint.

Case II.—Was a lad who fell and injured the elbow. The nearest medical man was called, who diagnosed it as dislocation, and accordingly herculean extension and counter-extension were made ; again and again it was tried, but the reduced bones would not stay in place. The medical attendant then suggested chloroform, but having no anæsthetic, he brought the patient to my office. Upon placing my finger and thumb on the condyles of the humerus, I found complete mobility of the joint, and could flex the forearm well on the humerus, which could not be done if dislocation were present. The lesion proved to be a fracture of the lower fourth of the humerus. Having an angular splint, adjustable, one half was immediately applied to the fore-arm, then a little extension, and the limb brought to rest in the other half of the splint, without much pain. It was successfully set and made a good recovery.

Case III.—Was another young lad whom his parents said had fallen and struck his elbow. The joint was very much swollen, but at this time there was complete mobility, the arm could be bent to any angle. It was placed in a sling and a lotion applied to reduce the excessive swelling, with in

structions to bring the child again shortly, but it was not seen again for two weeks. The joint's action was materially interfered with now, resulting from retained position and the discovered lesion present. Upon examination of the joint carefully it seemed to be all right, as by slight force the arm could still be bent at an acute angle, and he could touch his lips unaided with the forefinger, but the joint evidently was not natural. What, then is the lesion? The ulna and the radius occupy their proper places, but compared with the sound elbow it is wider and sharper to the touch internally, and there seems to be a slight depression between the shaft of the bone and the inner condyle. Putting these together undoubtedly the diagnosis is a separation of an epiphysis, or if you please a fracture of the inner condyle. Now its condition made it impossible to diagnose exactly at first, and before it was again seen it was too late to attempt adjustment, if indeed it could have been at all, inasmuch as it is always a matter of doubt after the lapse of so much time. The object was to secure as much action as possible, not forgetting that the most carefully treated cases leave but a limited action, to accomplish which passive motion was ordered, even to bending the elbow at an acute angle occasionally, but the case did not progress to suit, and therefore was taken to another practitioner. Strange to say, his diagnosis was dislocation, and the poor little fellow had to undergo a process of extension and manipulation of a very painful character. Of course, if his ideas were correct it would require it after the lapse of four to five weeks. After this treatment, "It wasn't exactly as he would have liked it," he said, "but if he had got the case from the beginning, he could have made a good job of it." The arm was put in splints for *two* days, then treatment as directed by myself substituted, thus unwillingly evidencing against his own expressed diagnosis, for surely no man in his senses would, after powerful extension and successful reduction, limit the application of the splints to two days, or grant such freedom of action.

Since the foregoing was written, the case has again come under my notice, and upon the closest scrutiny, no difference in the joint can be detected. The fragment is still there, but comparatively firm. The joint is wider, but as union has gone on strength has returned, and the lad can use it more

dexterously. The arm hangs at an obtuse angle, but will improve by suspending weights daily. He can place his hand to his nose, and upon the whole the recovery is not bad.

Case IV.—Is recent and is now under treatment. This is a lad too, five years of age, who was pushed from the railing of a bridge backwards, struck his elbow and dislocated both bones posteriorly. The points mentioned by Professor Dupuis were very prominent here. Being a nervous, irritable lad, it was thought advisable to give him a little ether and chloroform. This done, extension and bending the elbow firmly over my fingers, reduced it immediately. An angular splint and bandage with arm carried in a sling, completed the procedure, and the case is progressing very favourably. By using passive motion occasionally, very soon no one will know that the accident ever happened to him.

To sum up then, on presentation of such injuries, the difficulties should be remembered, and criticisms on other's actions should be sparingly expressed. Where there is the slightest doubt, consultation should be had, and whether doubt or not the examinations should be for the first week frequent. One should never misrepresent a case for the sake of a little popularity, such cannot be honorable and will surely return in some shape. The best of us are liable to errors, it is only humanity repeating itself—"To err is human."

ON PLACENTA PRÆVIA.

BY W. O'DELL ROBINSON, M.D., ST. JACOBS, ONT.

I send you a brief report of the following cases which may interest your readers, and also show the various forms of cases one is called upon to treat from time to time.

CASE I. Feb. 2, 1880. Mrs. H. had nearly reached the seventh month of gestation, when I was summoned in great haste to see her. The hemorrhage was profuse, which, however, I succeeded in controlling by the usual palliative measures. There was no return of the hemorrhage for about four weeks, when I was again summoned. I found her in a very exhausted and weakened condition. Immediate action was called for. I at once introduced a piece of soft cotton, saturated with vinegar, and used it as a plug. I then gave

her a dose of ergot, and after this had been repeated a few times the flowing began to diminish. I now made an examination and found the placenta attached over the inner os; the presentation was a breech. A messenger was despatched for Dr. Passmore, of Conestogo, to meet me in consultation. By the time he arrived the flowing was very well controlled, the os was beginning to dilate, and we concluded to let the labor go on until the os was dilated sufficiently to allow of the separation of the placenta, which we did. I then introduced my hand, seized the foot and delivered the body. When the head became engaged in the inferior strait, all the traction we could make was of no avail, so I concluded to try other means, and for this purpose introduced the blunt hook, made it secure in the superior orbital surface of the maxillary bone and by strong traction delivered the head. The woman made a slow but good recovery.

CASE II. Feb., '81. Mrs. K. This case was similar to the first, with the exception that it was a head presentation. I adopted the same plan of treatment as in the first case, but continued it for a longer period. When the symptoms became alarming, Dr. Ullyot, of Elmira, was summoned to assist me. We at first thought of giving chloroform, but owing to the prostrated condition of the patient we concluded to deliver if possible without its administration. I then introduced my hand, well oiled, seized the foot, after some little difficulty, turned and delivered. There were some symptoms of metritis, which lasted only a few days; the woman made a good recovery.

CASE III. April, '82. Mrs. B. had reached the eighth month of gestation when I was summoned by a messenger, who informed me that the pains were not very severe, but the flooding was alarming. When I arrived I found upon examination the os sufficiently dilated to allow me to ascertain how matters were. After using means to control the hemorrhage, I despatched a messenger for Dr. T. W. Vardon, of Hawkesville. The placenta in this case was attached laterally above the os internum and to the left side of the cervix. The presentation was natural.

We succeeded in pushing the placenta aside and delivered the child vertex first, removing the placenta afterwards. The patient being in a weak and anæmic condition made a very slow but good recovery.

Dr. Playfair in his admirable work on midwifery asks, Is it justifiable in cases of placenta prævia to use means to check the hemorrhage and allow pregnancy to continue? This is the course which has generally been recommended in works on midwifery. It is recommended to keep the patient cool and at rest on a hard mattress, and cold cloths applied to the vulva and lower part of the abdomen. Also to administer astringents to arrest the hemorrhage. The propriety of this plan of treatment has of late years been called in question. Dr. Greenhalgh (Obst. Trans., vol. vi, p. 188) advises the immediate induction of premature labor in all cases of placenta prævia. Many other eminent authorities are of the same opinion. In fact, labor very often comes on of its own accord, but when it does not do so, the patient's life must be considered in great danger until the delivery is effected, inasmuch as fatal flooding may come on at any moment. Dr. Playfair therefore says "that it may safely be laid down as an axiom that no attempt should be made to prevent the termination of pregnancy, but that our treatment should contemplate its conclusion as soon as possible." He would however make an exception to this rule, when the hemorrhage occurs for the first time before the seventh month of utero-gestation.

VENESECTION IN ACUTE RHEUMATISM.

BY T. W. DUNCOMBE, M.D., WATERFORD, ONT.

Mr. A. L—, æt 23, was attacked with acute rheumatism on the 20th of April last. The symptoms present were pain, tenderness, heat, swelling and redness of the skin in the neighborhood of the joints. Even the movements of the bed clothes, or the slightest pressure over the joints excited great pain. The swelling was most noticeable in the knee, ankle and hip, affecting first the right leg, and a week later the left. He had more or less pyrexia, and sweating was a prominent symptom at night. The treatment adopted was as follows, viz.: salicylate of soda, bicarbonate of potash, colchicum and quinine; but this did not seem to relieve the symptoms much, although he afterwards had less pain and pyrexia. About the middle of April he was able to go around with crutches. From that time until the 1st of June, he did not improve any, when he came to me.

On examination of the heart I discovered well-marked pericarditis, more or less pain and swelling in the joints, especially in the knee and ankle, pulse 112. temp. 102°. I prescribed salicylate of soda, and bicarbonate of potash, with a mercurial pill at bed-time. Again saw him on the 3rd, but as he was no better I at once suggested that bleeding might help him. Took a pint of blood from his arm; immediately the pyrexia abated somewhat, and the pain was greatly relieved. I also gave him two mercurial pills. On the 5th he was able to walk without crutches, and on the 7th the pulse and temperature were normal, the pain entirely abated and from that time he recovered rapidly, and is now apparently as well as ever, and says he thinks he could outrun me on a hundred yards race.

Correspondence.

RÖTHELN OR GERMAN MEASLES.

To the Editor of the CANADA LANCET.

SIR,—In a recent issue I read with much pleasure, "Cases in Practice," by Dr. Alexander, but I am of opinion that his conception of Rôtheln which he terms German measles, is not quite correct. Measles are measles no matter if contracted by a German or a Turk.

So far as I have been instructed, Rôtheln is a hybrid, and I had a marked case of it about three years ago, under the following circumstances:—I attended a lady in her first confinement, and after having finished my duties, was desired to look at an adopted daughter of the family, whom I found suffering from scarlet fever. I at once enjoined isolation. A neighboring lady whose entire family was down with measles, desiring to be of service to the young mother, visited her with her infant child in her arms, upon whom the eruption was still out. In the course of a week I was again summoned and found the infant highly fevered, (I did not enter the temperatures in particular) with an eruption of a duplicate character; as regards diffusion it was general like scarlet fever, but of a coppery hue with here and there a few crescentic spots slightly elevated, but not the well marked characteristic eruption of measles. There was coryza together with strawberry tongue, and

slight inflammation of the fauces. The infant being but a week old the treatment was of necessity of the mildest character—sponging and keeping up the action of the skin with liquor ammoniæ acetatis, and recovery was complete with desquamation. This, according to my view, is the only case of Rôtheln I have seen where I could actually and clearly trace the source to double infection.

Fenwick, Tanner, and many German authorities confirm this view, and I am sure it would be highly interesting if Dr. Alexander could inform us if there was any chance of the double infection, remembering always that we may have scarlet fever *without* eruption, only having the tongue and throat symptoms with desquamation subsequently as a confirmatory point in the diagnosis.

Yours faithfully,

JAMES SKIRVING.

Tavistock, Ont., Nov. 1st, 1882.

NASO-ORAL RESPIRATORS.

To the Editor of THE CANADA LANCET.

SIR,—Will you kindly permit me a short space in reply to a communication which appeared in the last number of the CANADA LANCET, signed *Medicus*, who complains that he was charged four dollars by his Kingston druggist for one of the G. Hunter McKenzie Naso-oral Respirators. Whilst admitting that the instruments are well adapted for the purpose for which they were intended, he says they are so simple in construction that they might be sold for a much less sum, etc. You kindly explained in a foot note that the retail price of the instrument is \$3, or \$2.50 by the half dozen, but *Medicus* forgets, or does not know perhaps that we have to pay a duty of 25 % upon goods of this description coming into the country from Great Britain. This added to the original cost, together with the expense of advertising, sending circulars to each physician in the Dominion (introducing the instrument), forwarding the Respirators *free* by mail, etc., leaves but a small margin of profit to myself; and it is not for me to say how much the manufacturer makes, but he should be well paid for inventing so simple an instrument, which, with ordinary care, is not likely to get out of order even with years of use. The very sim-

plicity of their construction is what has caused them to be used so extensively by physicians. I sell them cheaper than any physician in the Dominion can bring them in for himself, and with them give one or two (as desired) prescriptions for their use. One of the physicians here got them for himself before I secured the agency, and they cost him \$3 75 each. I have sold several hundreds of them during the past six months to physicians of the various provinces of the Dominion, and have had only one or two complaints as to price, but on the contrary have had scores say that they are more than worth the cost; and have had most valuable testimonials as to their curative powers. They all think it is without doubt a decided advance in the treatment of phthisis, as well as bronchitis and nasal catarrh.

Yours, etc.,

J. S. MILLS,

Sole Agent for the Dominion.

Brantford, Nov. 13th, 1882.

CASE OF POISONING FROM STRAMONIUM.

To the Editor of the CANADA LANCET

SIR,—On Oct. 31st was called to see a child æt. 2½ years, said to be suffering from convulsions. Found the child in maniacal delirium, pulse small, intermittent, and so fast I could not count it; the body was covered with a brilliant red rash, the pupils were widely dilated, and the little sufferer would scream out as though in fear of falling. From the appearances I thought it might be the effects of stramonium, and gave an emetic which it readily took from a nursing-bottle. I found in the vomited matter a number of the small ends of the datura stramonium. After the emetic had acted I gave a dose of castor oil which brought away about a large tablespoonful of the seeds. On looking around the place I found a plant of the stramonium species, when the sister remembered that the child had been playing with one of the capsules the day before. I think the case is remarkable from the number of seeds which passed through the child without causing death, as the number brought up by the emetic was very small, the greater portion having passed into the intestines and had time to produce their full effect. The child was all right the next day, except that the pupils were dilated.

Yours truly,

S. S. MURRAY.

Thorndale, Nov. 1st, 1882.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

August 30, 1882.

In the absence of the President and Vice-Presidents, Dr. Macdonald occupied the Chair.

Dr. Machell showed an encephalic monster with two rows of spinal tubercles extending as low as the last dorsal vertebra, due either to spina bifida or a double row of spinous processes.

Dr. McPhedran stated that microscopical examination of the ruptured uterus shown at last meeting demonstrated marked granular degeneration at the seat of rupture.

Dr. Workman read a paper on "Myoidema, or pachydermic cachexia," embracing a full resumé of the now well-known views of Gull, Ord, Mahomed, Goodhart, Charcot, and Haddow. The paper was a translation from the *Rivista Sperimentale*.

September 21, 1880.

The President, Dr. Geo. Wright, in the Chair.

Dr. McPhedran showed a boy, aged six, suffering from summer prurigo. The eruption first showed itself early in the summer of last year, continuing till the advent of the cold weather, when it disappeared, reappearing again this summer, as soon as the weather became warm. It is much worse this summer than last. The family history contains nothing of importance. The child is vigorous and lively. The eruptions consist of pinkish papules, varying in size from a pin's head to three or four times that size, the apex capped with a thin whitish scale; in many papules the scale is replaced by a scab. The only parts free from the eruption are the scalp, upper part of face, axillæ, anal fissure, scrotum, palms and soles; it is most abundant on the outer side of arms and legs, where the skin is thickened, harsh and dry, and scratch marks and scabs are very numerous. At night the itching is intense, and the pain produced by scratching disturbs the child's sleep very much. There is but little itching during the day. The axillary, cervical and inguinal glands are enlarged, and the belly prominent, being at times especially so. Treatment has done no good as yet. Sulphur and tar baths have been tried, but the facilities for prolonged bathing are imperfect. Ar-

senic, iron, and cod liver oil have been given internally.

Dr. Graham said the case was a most typical one of summer prurigo, as described by Hutchinson. He had had two cases in his practice, but they were complicated by wheals, and might be looked upon as lichen urticatus. He had recently seen a case of the inveterate prurigo (Hebra) much benefited by naphthone ointment.

Dr. Cameron said he had a similar case, to the one presented, of three years standing in an adult. He was inclined to believe that true prurigo occurred more frequently than acknowledged by the authorities. He saw a case a few years ago.

Dr. Oldright showed a case of leucoderma in a young man. It began two years ago, and occurred in small spots, chiefly on the right side of neck and chin. There was no evidence of any constitutional taint.

Dr. Cameron reported a similar, but more marked case under his care at the Toronto General Hospital at present, the hyper-pigmentation around the spots being very distinct. He advised the local application of liq. epispaeticus, and the internal administration of cod liver oil, phosphides, especially the phosphide of silver, etc.

Dr. Graham saw a case treated successfully, temporarily, at least, by mustard plaster.

Dr. McPhedran next showed a young woman with a tubercular and bullous eruption, possibly due to the bites of the *Cimex Lectularius*.

Dr. George Wright read a paper on Rötheln, in which he gave a very full account of the disease, with its treatment. He traced its history from the time it was first described as a form of measles or scarlatina, or a hybrid of both, one hundred or more years ago down to the present time, when Rötheln has been accorded a place among the essential fevers.

Dr. Cameron thought the disease should be called Rubella, as suggested by the American Dermatological Association, and spoke particularly of the character and behaviour of the rash, the pulmonary and other symptoms. He said there had been an outbreak of Rubella in the House of Providence during the past summer, followed by, and continuous with it, another of measles. There were no deaths in the former, but a large number had terminated fatally in the latter.

Dr. Graham said an outbreak of Rubella had

occurred in Brampton in 1872, and was described in an article in the CANADA LANCET, by Dr. Heggie. This was a year before the first outbreak occurred in New York, according to Dr. J. Lewis Smith, as stated in the paper read this evening.

Dr. A. H. Wright said a wide-spread epidemic occurred in Colborne, Ont., during the second year he was in practice. He thought there was great difficulty in diagnosis owing to the varying character of the symptoms.

Dr. Oldright said outbreaks of what was called hybrid measles and scarlet fever, by the leading physicians, occurred in Toronto during 1863-65.

Dr. Temple referred to an outbreak which had occurred in one of the ladies' schools during the recent epidemic, and asked the opinion of the Society on the propriety of closing the school.

Dr. McFarlane said he had had some very severe cases during the recent outbreak, one child having died. In this case the rash came out quickly all over the body; was abundant, bright-colored at first, but became darker in a short time, and the child died from exhaustion in a few hours. Dropsy had followed in a few cases he had seen. He believed it was most likely confounded with scarlet fever.

In answer to Dr. Temple, Dr. Cameron said he thought the school should not be closed but quarantined, as the poison being disseminated in the early stages of the fever would be carried home by the ladies.

Dr. Nevitt agreed with Dr. A. H. Wright as to the great difficulty in making the diagnosis in many cases.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the CANADA LANCET.)

The regular quarterly meeting of this Board was held Oct. 1st, 1882. The President read his annual address, reviewing the work of the Board, and suggesting work for the future in the line of securing the introduction of text-books on hygiene in the schools; greater attention by localities to the pay of health-officers, and some amendments to the public health laws, etc.

The Secretary presented a communication relative to wounds from toy-pistols, describing the pistols and the nature of the cartridges as determined by analysis, also a report of several cases of lockjaw and death following toy-pistol wounds.

Dr. Lyster reported in preparation a paper on the present knowledge of typhoid fever, and he was requested to prepare his paper in the form of a document for publication in the Report, and for distribution. In this connection Dr. Baker presented two diagrams, showing for the year 1877-1880, the relations of deaths from that disease to population, from which it appears that the common opinion among physicians, that this disease prevails mostly between the ages of 18 and 35, and that there is little danger after 40, is not sustained by facts. A greater proportion have typhoid fever at the ages between 60 and 80 than at any other age in life.

The subject of compulsory registration of plumbers was referred to Mr. Parker, and Dr. Lyster, for the purpose of bringing it before the Legislature.

The committee on sanitary conventions was authorized to make arrangements for a convention at Muskegon about the last of November, or first week in December.

The Secretary was authorized to purchase a Thomson's Quadrant Electrometer, and by means of it to enter upon the observation of atmospheric electricity.

Mr. Parker presented a proposed bill, making it a criminal offence to communicate a contagious disease, and it was ordered to be published in the Annual Report, for the purpose of bringing it before the Legislature.

In Detroit, it was stated, that it was proposed to erect a "flame-ventilated" small-pox hospital as proposed by Dr. Wight, the Health-officer. Members questioned the practicability of the plan, and it was referred to a committee.

A committee consisting of Mr. Parker and Rev. Mr. Jacokes, was appointed on a plan for the regulation of medical practice. The next regular meeting will be on January 9th, 1883.

Selected Articles.

CLINIC BY DR. S. W. GROSS, PHILADELPHIA.

RETENTION OF URINE, ITS CAUSES AND TREATMENT.

GENTLEMEN.—This young man comes before us saying that he is suffering with retention of

urine. The first thing to be done when you are called to a case of this nature, or see one in your office, is to ascertain the cause of the retention. If it occurs in an infant you may assume that it is due to an elongated and contracted prepuce; if in an old man, that it is caused by an enlarged prostate gland; if in a young man, like the patient before us, you will usually ascribe it to a recent attack of gonorrhœa, or to a stricture of the urethra, and you can prepare your instruments accordingly. Of course there are exceptions to these rules, but these are generally true.

This man says he has suffered from inability to pass water for the past six weeks, off and on; that is to say, the retention has not been constant, but comes on frequently. He has had several attacks of gonorrhœa. He thinks his difficulty is caused by a stricture, although he has not had his urethra examined; but physicians who were called in to draw off the urine have told him so. He states, however, that they had no difficulty in passing the catheter into his bladder. According to his statement, he is not a drinking man. The present attack came on him after exposure to cold, and he says it was aggravated by excessive sexual intercourse; he always finds after such connection that he has retention of urine. There is some dribbling of urine, and pain is caused by pressure over the pubes, but the bladder is not very greatly distended, the dulness on percussion not extending much above the pubes.

By retention of urine we simply mean inability to evacuate the bladder. With it is usually found pain and tenderness, and, in addition to these symptoms, there is more or less pyriform tumor above the pubes, extending towards the umbilicus.

He passed a little water two hours ago; he has a constant desire to empty his bladder, and there is a little dribbling, which may be termed the incontinence of retention. When called to attend a patient—especially a woman—said to be suffering with incontinence of urine, do not treat the incontinence before examining the bladder; you may find that it is simply too full, and is overflowing.

It is important to remember that in all these cases of retention from stricture of the urethra, the real cause of the retention is not the stricture itself. The narrowing of the urethra by a stricture is never so tight as to completely obstruct the flow; and, in the majority of cases, the cause of the trouble is swelling of the inflamed mucous membrane just behind the contraction, combined with spasm of the muscular fibres of the urethra, induced by exposure to cold or indulgence in alcoholic drinks. Therefore, in these cases, if you give your patient a hot bath, and a full dose of opium, you may relieve him; it is not always necessary to pass a catheter, for anything that will relieve the spasm will remove the retention. I will try to pass this small, olive-tipped, flexible

bougie. It goes in readily. Now, as I withdraw the instrument, I instruct him to try to pass his water, and you see it flows freely, the spasm being relieved. It is not always necessary to pass a hollow instrument, as you observe. There is nothing more to be done at present, but the young man is recommended not to neglect the stricture, but to return here, in the course of a few days for its treatment. He says that when he gets up in the morning he finds the meatus glued together by a slight discharge. I will order for him two copaiba capsules after each meal; each contains five grains of copaiba and five of cubebs with magnesia and carminatives so as to prevent disagreement with the stomach. He shall also use as an injection, several times daily—

R—Liq. plumbi subacetatis, f ʒ j
Aquaë, f ʒ x.—M.

CARIES OF THE WRIST, FOLLOWING SYNOVITIS.

This man is 65 years of age; a weaver by occupation. He says that while lifting a heavy stone, about nine months ago, he sprained his wrist, and he has not been able to use it since, but it has remained stiff, painful and swollen. The pain has lately increased, requiring large doses of opium to give him rest at night. There is no history of syphilitic disease, or of any strumous trouble. There is no constitutional vice, therefore, to account for the outbreak; but, as he has just stated, it is the result of an injury received nine months ago.

He says that he thinks he twisted his wrist; it became swollen at once, but there was no marked discoloration at the time, as far as he can recall. The pain is getting worse, and sometimes the arm jerks and wakes him up from sleep. You will see, upon comparing the right arm with the left, that there is a marked distortion of the right wrist; it looks as if there might have been a subluxation of the joint, though, of course, there is nothing of this description. When I take hold of the forearm and hand, and press the bones together, it increases the pain; but when I make extension and counter extension the pain is at once relieved. At one point on the outside of the joint there is an opening; he says that about four weeks ago it was so swollen and red that a physician lanced it, and it discharged freely. This incision is still open, and upon inserting a probe I find it comes immediately in contact with dead bones; I feel the roughened surface of the trapezium, and of the first metacarpal bone, with which the former articulates. There is a good deal of thickening of the joint, and, as you see, some suffering upon the introduction of the probe.

We have, then, a case before us of caries of the wrist-joint; or, at all events, of the trapezium, and probably of some other bones of the contiguous row. This commenced, probably as a synovitis. I believe that the bone was not injured originally,

but becoming involved in the surrounding inflammation, the cartilage has been destroyed, and the bone itself carious. When I pressed the bones together you saw the man wince. On the contrary, when I made extension, so as to keep their inflamed surfaces separate, he told you that the pain was relieved. Please remember this. As regards treatment, whether it will come to the question of resection of the joint or not, I am unable to say at the present moment; but as suppuration was only apparent a month ago, it shows that the pus is of recent formation, and that active caries is still going on. In this state of affairs operative measures for relief of the caries would be ill-advised. We must apply remedies for the relief of the local inflammation, such as a strong solution of muriate of ammonia, or lead water. The application of a splint and extension are also necessary. You are aware that in all active joint-disease, whether of the knee, the hip, or vertebræ, the first objects of treatment are to keep the joint at rest and to apply extension and counter-extension.

I feared that there was destruction of the cartilage here, and that the joint was inflamed, before introducing the probe, because he spoke of the painful, spasmodic jerking of the limb at night; the inflammation of the joint transmits the sensation of pain to the spinal cord, where it is transformed into a motor impulse, causing a spasmodic contraction of the muscles around the joint, bringing the inflamed surfaces violently in contact, and producing so much pain as to wake the patient from his sleep.

The same general treatment is required as in Pott's disease of the spine, or inflammation of the knee or hip; the principle is identical; you need only have a modification of the apparatus.

In order to accomplish the desired end, I will have the fore-arm shaved, and I will apply two pieces of adhesive plaster, three inches wide, front and back, which shall extend from above the wrist to several inches beyond the fingers. I will then apply a straight splint, containing a mortise opening, and bearing at its extremity an iron hook, to which the ends of the strip are to be fastened, after sufficient extension has been made; the fore-arm being placed upon the splint, which is held in place by adhesive strips, elastic extension will be kept up constantly, with great relief to the patient. He will rest better, his appetite will return, and his general health improve, soon after the apparatus is applied. It does not interfere with any local treatment, or the use of the lotions already referred to. No internal medications will be needed. In joint disease the patient runs down, not so much from the cachexia or long continued suppuration, as from the constant suffering and loss of sleep, and as soon as you relieve the pain the patient picks up. In joint disease, rest, with relief from pain, is the sheet-anchor of the treatment.

SARCOMA OF THE ILIUM.

When this man lies upon his face you will notice a very great difference in the appearance of the buttocks. The left buttock projects as a hemispherical tumor, there is obliteration of the gluteo-femoral crease, and the internatal line inclines to the affected side. I find that the local temperature is elevated two or three degrees, although the precise increase can only be determined with a surface thermometer. The tumor is elastic, and apparently fluctuating; but the integument is not discolored, nor are the subcutaneous veins enlarged and prominent.

Such a swelling, with elevation of temperature and fluctuation might be an acute abscess, and if there was no evident increase of heat, it might be a strumous abscess or what has been called a cold abscess, which often occurs in this location. Why may this not be a cyst? A cyst possesses fluctuation and swelling, but no heat; at least I never saw such a cyst. Therefore the very presence of heat suffices to eliminate a cyst from the diagnosis. The elements of the age of the patient and the duration of the tumor must not be left out of our consideration. The man is 47 years of age; he only noticed the tumefaction twelve months ago; he says it began with a pain in the hip and back, and he thought he had rheumatism; he subsequently found that the part was swollen. There was no injury, as far as he knows.

We have here a swelling which commenced without an assignable cause, and with pain of a rheumatoid character; it was a dull, heavy pain. Is it a tumor? I trace the outline of the limb; I find the upper border of the great trochanter, and I can also trace its posterior surface; hence I infer that we are not dealing with a growth from this process of bone. I can also trace the outline of the tuberosity of the ischium, so that it cannot be a tumor growing from this bone; but I cannot follow the innominate bone, and conclude that it possibly involves the ilium. We could ascertain the nature of its contents with an exploring needle, but we know that it is not an acute abscess, from the time required for its development; it is a tumor, and from its comparatively rapid growth, I am safe in assuming that it is a sarcoma, without the use of the exploring needle. He tells us, however, that a needle was introduced by a physician a few days ago, and that nothing came out but a little blood. This is a sarcoma, a most malignant tumor of the connective tissue series. Its exceedingly rapid growth, attaining this large size in only twelve months declares its nature. We might have a chondroma, or a bony tumor in this situation, but they would be of much slower growth and of firmer consistence. The pains that he refers to, shooting down his legs, are probably caused by the pressure of the growth upon the sciatic nerve,

with the distribution of which the description agrees.

From the symptoms, I regard this as an example of small-celled sarcoma. Nothing can be done in the way of surgical measures; but we may possibly retard the rate of growth, and prolong his life, by applications of sugar of lead.

ADENOMA OF THYROID GLAND OR GOITRE.

This woman presents herself with a tumor in the median line of the neck, which she first noticed when she was sixteen years of age; as she is now thirty-seven, it has existed nearly twenty-two years. For the last few months, however, she has had increasing difficulty in swallowing, and she says that last week it became almost impossible to get anything down except fluids. She has no difficulty with her voice whatever, only with deglutition. There is a slight cough. You observe that when the woman swallows, the tumor rises and falls; this shows that it is attached to the thyroid gland, the thyroid gland itself, as you know, being attached to the trachea, so that it moves when the larynx rises in deglutition. This tumor extends, on the one hand, as far down as the notch of the sternum, between the clavicles; and, on the other, as high as the pomum Adami, or the most prominent portion of the thyroid cartilage; on each side it extends under the border of the sterno-cleido-mastoid muscle. The growth is rather movable, prominent, dense, but not uniformly so; in some places it appears to be soft, as if undergoing degeneration.

We have here an adenoma of the thyroid gland, called by the Germans "struma," by others a goitre. Indeed, all goitres, in their beginning, are adenomata. Goitre is not very common in this country; it is more so in the mountainous regions of Europe. As we see it, goitre is not a very important affection; it occasionally produces difficulty in swallowing, as in this patient. There is no pain, and no evidence of pressure on the pneumogastric nerve.

There are several things which might be done for this disease. Sorbefacient remedies are often serviceable. A very common prescription with me is the following:—

R.	Unguent. hydrarg. biniodid.,	5j	
	Camphoræ,	3j	
	Cosmoline,	3j.	M.

I direct the patient, each morning, to take a piece the size of a marrow fat pea, and to stand so that the direct rays of the sun may fall upon the goitre while the ointment is rubbed in. The application may be repeated at night. I will also give her five drops of Lugol's solution, to be taken largely diluted, after each meal. You might order in place of this, muriate of ammonia; in twenty-grain doses, three or four times in the twenty-four hours, and by gradually increasing the dose, we might confidently look for some decrease in the

size of the growth. Under these remedies, we frequently find that the tumor almost entirely disappears.

We might treat this case by parenchymatous injections; iodine in various forms, or ergotine, or Fowler's solution may be thrown into the tumor; but I do not think any great benefit would result. These interstitial injections have no special advantage to compensate for the danger of the occurrence of inflammation, necrosis, and abscess, which may endanger the life of your patient. There is also the operation of thyrectomy, which has been practiced for the last twenty-five years, but more particularly within the last ten years, with very fair results. Taking into consideration the difficulty of the operation, the neighborhood of important vessels and nerves, and the danger of diffused inflammation of the soft tissues of the neck, it is remarkable that the operation is so successful, the mortality being about twelve per cent.

This woman will use the ointment and Lugol's solution, as directed, and if the difficulty in deglutition increases so that the obstruction is permanent, she will return to have the gland extirpated. As good surgeons, you will always try the simple measures first, before resorting to harsh ones. Let her report in three weeks.

SYPHILOMA OF THE STERNUM: CONGENITAL SYPHILIS.

This little child, eight years of age, is brought here by her mother, on account of the swelling over the upper bone of the sternum; she also has a skin eruption upon her lower extremities and other portions of her body. I will merely show it to you, as the mother refuses to allow me to give an anæsthetic, and the child is too noisy to permit any extended examination. It forms a fluctuating swelling of considerable size, and the skin over it is discolored. It is very evident that this is simply a broken down gumma over the sternum. The case is one of congenital syphilis, and is under appropriate treatment.

SEBACEOUS CYST OF THE SCALP.

This man, who has a prominent swelling upon his scalp, tells me that his mother had a similar development. I asked him the question incidentally, because I had in mind the case of a man suffering with mammary cancer upon whom I operated at this clinic, whose scalp was covered with these excrescences, and his daughter who came with him also had a number of them. Let me say in this connection that many of the surgeons mention as one of the points of difference between a malignant and a benign growth that only the former is inherited. They seem to overlook that this also occurs with innocent tumors, even with the simplest of all, the sebaceous cyst.

This, as you see, forms a roundish tumor beneath the scalp, feeling soft to the finger; it is covered with skin partially deprived of hair. It is

caused by occlusion of the orifice of a sebaceous follicle, and the retention of its contents. A sebaceous gland may have its duct terminating in a hair follicle, or it may open independently upon the surface of the skin. In either case the orifice may be closed by the introduction of a foreign body, or by inflammation; the cyst thus becomes distended, and its wall thickened, the epithelial cells keep on undergoing fatty degeneration and accumulating, and the tumor continues growing until it gets to be the size of a small apple, very rarely larger. They are most common on the scalp, face, and lobule of the ear; but may occur in other parts of the body, wherever sebaceous glands exist. They usually contain, a soft, pultaceous, putty-like mass, but in some the contents are fluid, and fluctuate upon pressure, and the sac is found to contain an oily fluid, the epithelial cells having undergone advanced fatty changes. Sometimes cretification occurs, and the cyst wall becomes calcified. These growths are gregarious, and are sometimes very numerous. They only give rise to annoyance by their presence; they are not painful. Sometimes, as when they are of long standing, they occasion, by constant pressure, absorption of the outer table of the skull immediately beneath them.

The proper treatment is complete enucleation, without leaving behind a particle of the cyst-wall, for the smallest fragment may lead to a new growth. In the most favorable cases, where the cyst is comparatively solid, we may make an incision, merely through the skin over the tumor, and enucleate it, like a filbert from its hull; even when it is more or less adherent it may often thus be removed without opening the sac. Some surgeons prefer at once transfixing the tumor with the bistoury, laying it open and discharging its contents, and tearing the cyst-wall out with the forceps. I prefer the former method when it is practicable. By a straight incision over the tumor, you see that its shining wall protrudes through the opening, and the entire cyst now slips out of its bed. I have not removed any of the skin, although it appears redundant, because it will soon shrink again in healing. One of the first principles of surgery is to clean the wound in order to obtain primary union. If I should close this immediately the blood would accumulate in the interior and cause suppuration. I will, therefore, let the patient wait until bleeding has ceased, and then bring the edges together with two points of the interrupted suture. The bleeding can be stopped by hot water applications, if it continues too long.

As regards sutures in the scalp, you will find it stated in the books that they may cause inflammation or erysipelas. Nothing can be further from the truth. You may apply them, whether of silk, silver, or other material, with as much freedom as in other parts of the body. The inflammation is

the result of the operation or of the wound, and is not caused by the sutures, any more than by tying together locks of the hair ; so you need never be afraid to introduce any kind of sutures into the scalp.

These sebaceous cysts may break down, and discharge by suppuration. Granulations will then spring up from the bottom, and will give rise to a very ugly appearance, causing them to resemble a malignant tumor. You will remember this possibility in making a diagnosis.

TUBERCULOSIS OF THE CERVICAL AND OTHER GLANDS.

Here is one of those cases that I had before you at the last clinic, of trouble in the lymphatic glands of the neck. The neck is very much swollen, and there are openings in several places in each side. Some bloody discharge is escaping from one, which extends deep under the fasciæ behind the jaw. When I press this swelling, a little pus exudes from the sinuses. He says that this scar on the left side was caused by an operation performed at this clinic. About a year ago my colleague, Dr. Levis, cut down over the sternocleidomastoid muscle and removed a mass of glands ; but you see here another large mass under the ear as large as an orange. These on the right side have simply been lanced.

We have an example here of tubercle of the lymphatic glands. One of these glands first became diseased, and the infection has spread to the others, and they have undergone cheesy degeneration, a very common thing in tubercular processes, whether of the lungs or elsewhere. He tells me that the glands are also enlarged in the arm pits, and I find a large mass under the left pectoral muscle. This shows that the disease is general ; it is similar to what we sometimes find in sarcoma ; it is really a malignant infection of the glands. If at the beginning I could have got at the first gland and removed it, I would have succeeded in preventing the infection of the other glands ; for that attack at least, for tubercle is apt to return.

Very much has appeared in the medical journals, of late, with regard to the bacilli of tubercle. They are small organisms which may be found with the microscope, with the power of about five hundred diameters, in sections taken from the lung and tuberculous glands. This micro-organism is said to be the cause of tuberculosis originally, and the means by which it extends to other parts of the body. Klebs, in 1868, first called attention to it, but his observations were lost sight of, until they were recently revived by Koch and others. Like the bacteria which are found in suppurating wounds, and in septicæmia, I believe that the bacilli of tubercle do not initiate the trouble ; they merely act as carriers of the infection, just as the white blood cell carries it. This is the whole matter. Here we have an infectious disease of the

glands. Either through the opening made in the original operation, or through the subsequent openings, the bacilli entered the wounds from the external air, subsequently multiplied in, and migrated into other glands, carrying infection with them.

We will not attempt any specific treatment, whatever, in this case, but simply tell the man to live on good diet, to take milk punch, to exercise in fresh air, and attend to his general surroundings ; we may also give him a tonic. In this way we endeavor to build him up, and render him capable of resisting the spread of the disease.—*Col. and Clin. Record.*

MALTINE IN NERVOUS DISEASES, ETC.

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My very successful experience with maltine makes me feel it a duty to the profession to point out some of the principal features of merit this very valuable preparation possesses. Prof. Ogden Doremus, of New York, claims that maltine "*is nutritive to every tissue of the body, from bone to brain.*" The opinion of this very distinguished chemical observer seems well based in fact, when we consider the composition of maltine, containing, as it does, in a most concentrated form, the most valuable and nutritive constituents of malted wheat, oats and barley. It therefore contains *three* most nutritive and digestive agents, rich as they are in phosphates, diastase and albuminoids. Hence at a glance, it is apparent that for constructive metamorphosis of the brain and nervous system at large, this preparation must prove most efficacious. The large proportion of brain and bone producing food it contains, therefore, makes it of incalculable benefit in many forms of wasting and asthenic disease. The large proportion of diastase and other albuminoids present in its composition, give it both digestive and nutritive value. Its digestive properties, in fact, enhance its nutritive or tissue forming capacity.

The nutritive constituents in these cereals vary respectively. The well ascertained fact that oats and wheat are preponderate in *nitrogenized* principles, is a substantial advantage possessed by a preparation of this character, and naturally very greatly elevates it in value over oleaginous articles rich in the hydrocarbons exclusively. Therapeutically, maltine thus has a much larger range as an analeptic measure, and supplies a want long experienced by the profession in the treatment of wasting and neurasthenic maladies. The large amount of the phosphates, albuminoid and other valuable nutritive elements in a preparation not unpalatable,

and which keeps perfectly in all climates, is an advance in nutritive preparations not too highly to be appreciated by the medical profession. Then, again, as Prof. Atfield observes, another advantage of no mean value is, that it "belongs to the *non*-alcoholic class, and is far richer, not only in the directly nutritious materials, but in the farina digesting diastase. In comparison with the alcoholic malt extracts, maltine is about ten times as valuable as a flesh former; from five to ten times as valuable as a heat producer; and at least five times as valuable as a starch digesting agent." With such chemical recommendations we can, therefore, no longer doubt the genuine merits of maltine. It occurs here to us to add that its *non*-alcoholic properties give it a signal advantage in chronic conditions of debility, as the prescribing of alcoholic preparations under such circumstances is a practice fraught with future dangers to the patient, for which the medical practitioner is, in a moral point of view, directly amenable to charges of criminal carelessness, as our experience fully attests. In a word, in all diseases of general debility, wasting or atrophic affections, and in nearly all varieties of indigestion, it is a therapeutic auxiliary, the most valuable we have as yet encountered, and with which we conscientiously say we do not tire, being daily more and more convinced of its advantages. With the long and very extensive practical experience we have had of its value, we would be at an infinite loss to replace it in our daily practice now that our confidence in its real merits has been so fully established. Such being a few observations upon maltine considered theoretically in connection with its composition or most beneficial constituents, we will now more particularly specialize some of its advantages from a practical and clinical standpoint, illustrative of the efficacious results attained by employing an agent so rich in diastase, and very important nutritive elements. At a glance it will be observed that the field for this preparation is in cachetic and diathetic conditions, all perversions of nutrition, difficult assimilation, disordered digestion, in which individual or all the gastric and intestinal functions are in abeyance, gastric and intestinal lesions, pulmonary affections, diseases of debility, general prostration, wasting maladies and all depressed or neurasthenic conditions of the nervous system. In a word, in the treatment of nervous diseases, maltine is one of the most valuable therapeutic agents at our command. Such being the immense scope for its usefulness, we will now more particularly endeavor to individualize some of the more special morbid conditions in which it has attained its greatest usefulness in our hands.

In the treatment of epilepsy it has always been desirable to possess some agent to give in combination with the bromides, in order to obviate the very depressing effects and tendency to the pro-

duction of dyscrasia, that the latter remedy sooner or later superinduces, when its administration is long continued, as it must needs be, in the treatment of that implacable affection. I have found maltine most useful in this connection, especially when it is given with iron and quinine or the phosphates, or some other of the various tonics with which the preparations of maltine are intimately united. It has the effect of greatly obviating the unpleasantly depressing effects of the bromide salts. In all the forms of dyspepsia, especially in the dyspeptic complication of neurasthenic diseases which are so common, constituting a vicious circle, one morbid condition reacting upon and aggravating the other, maltine is invaluable, especially when administered in combination with pepsin and pancreatine—which latter preparation contains six grains of pepsin and pancreatine to the table-spoonful.

In chorea, hysteria, and many allied neurotic conditions, where cerebro-spinal anæmia is one of the principal underlying pathological conditions, I know of no remedy which, as an *auxiliary* method of relief, I consider more urgently indicated when combined with the classical remedies which are resorted to in these diseases. As a nutritive tonic I use it exclusively in the place of cod liver oil, and alone or in emulsion with the latter, I deem it a most important and useful therapeutic agent in pulmonary affections, and, as I have said before, in neuralgia, epileptiform complications, many varieties of paralysis, chronic and numerous other neurotic affections, I have found it a most important adjunct when combined with the standard remedies usually administered in such cases. In many perversions of nutrition, such as the atonic and nervous varieties of dyspepsia, maltine has a most happy effect, correcting functional gastric disturbance, improving digestion, promoting assimilation, and *rapidly increasing bodily weight*.

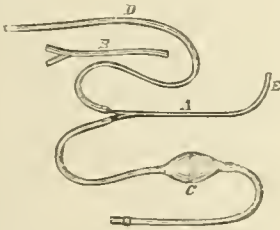
In neuralgia, when "the hungry nerve cries out for food," there is no analeptic preparation that equals it, especially when administered with phosphates or hypophosphites. Cod liver oil is hardly comparable, because there are so few stomachs that will tolerate the latter remedy for a great length of time, and at all seasons. The combination of maltine with *peptones* is highly desirable in this affection, and is a very useful preparation, which being highly nitrogenized and rich in albuminoids, cannot fail to be of service when administered in conjunction with quinine, iron, the arsenical preparations, and other remedies which constitute the armamentarium of the physician in neuralgic diseases. In grave and hopeless cases of organic nervous lesions, maltine is useful by aiding nutrition and promoting the functions of digestion and assimilation which are so frequently perverted. In such cases it certainly serves to prolong life. Such are some of the more important

uses of this remedy which I have cursorily reviewed. Some I have, doubtless, overlooked, and many not analyzed in a sufficiently exhaustive manner.

One merit possessed by maltine is, to my mind, one of the greatest claims corroborative of its superiority and advantages over nearly all other analeptics, namely: that when administered *alone*, as I have not seldom witnessed, it will exercise in not a few instances the most happy and beneficial effects. There are very few cases of *chronic* nervous diseases, or conditions of depression in other affections, not in any way allied to the neurotic group, in which I do not prescribe maltine, and expect to reach results no longer a source of astonishment to me, but which are daily witnessed in my practice from its administration.—*St. Louis Med. and Surg. Journal*.

CYSTITIS—TREATMENT BY WASHING OUT THE BLADDER.

A. Male double current silver catheter with flanges for attaching rubber tubing. *B.* Female double current silver catheter without attachments. *C.* Household syringe attached to catheter with rubber tubing. *D.* Rubber tubing attached to the catheter for the purpose of conveying the fluid to a vessel at the bed-side of the patient, preventing soiling of the bed.



The treatment of diseases of the bladder has heretofore been very difficult on account of the crude means of applying remedies to the diseased organ. By the aid of a suitable instrument diseases of the mucous membrane of the bladder are as amenable to treatment as if located externally. The bladder must be kept free from decomposed urine, in order to effect a cure.

A continuous current of pure medicated water can be carried through the bladder, and the organ kept free from mucus, gravel, blood-clots, etc. There are bacteria in all decomposed urine which keep up constant irritation of the mucous membrane. Carbolyzed warm water passed through the bladder destroys them. The instruments heretofore used for washing out the bladder have been very poorly constructed, and I have been very much annoyed with their use, hence the invention of this instrument.

Prof. S. D. Gross, in the *Med. Gazette* for May,

1882, says, "The local treatment of cystitis is the most important. As regards the treatment of the urine, it must be borne in mind that the ammonium in the urine keeps the bladder in a constant state of irritation. The first thing to be done, therefore, is to wash out the bladder. The best way, perhaps, of doing this is to procure a gum-elastic bag holding about four ounces, and to have a basin of water at 98° F., ready. Then after drawing the urine with a flexible catheter, whose end is smooth, allow the catheter to remain *in situ*, and the bladder may be washed out by simply connecting the mouth of the bag with the catheter. The warm water thus injected should be retained as long as possible, and then drawn off, and the operation repeated." With the use of the above instrument the patient can lie in bed and have any quantity of pure or medicated water passed through the bladder without removing the catheter, or distending the same in the least, but if desired to distend the bladder, compress the delivery tube with the thumb and finger, and continue to force water into the bladder until a sufficient quantity has been thrown in, then remove the pressure and let it pass out.

Some of our eminent surgeons have advised the operation of lithotomy for the cure of cystitis. The incision is kept open in order that the urine may pass off as soon as it is secreted by the kidneys, so that it will not remain in the bladder and keep up irritation of the organ. Such eminent men as Emmet, Parvin and others, have operated upon females and kept the incision open for twelve months in order to give the bladder rest, and nature a chance to repair the damaged organ. My mode of treating irritation of the mucous membrane of the bladder, from whatever cause produced, is to keep the bladder washed out thoroughly—if necessary keep a stream of water constantly running through the bladder, and not allow the urine to remain in the organ long enough to become decomposed. I will give a few cases, treated in this way, for illustration.

Mrs. M—, 39 years of age, the mother of nine children, the youngest five years old. She stated to me that she had been suffering intensely with her bladder for nearly four years. She has passed a great number of small calculi from the size of a pea to mere sand. Her suffering has been increasing, and calls to micturate have become more frequent, and painful, at the present time nearly every fifteen minutes. On examination of her urine I found it very scanty, high colored, and containing clots of blood, and a quantity of mucus. It also contained phosphates and bacteria in abundance. I washed out the bladder with warm water acidulated with nitric acid every day, and the sand came away in large quantities at each washing. The sand finally ceased passing and the patient improved in flesh and strength rapidly,

but still the urine remained ammoniacal, and contained bacteria. The use of carbolized warm water soon removed them, and the patient was entirely cured. Twelve months have elapsed since and the patient is in good health.

Mr. B.—, 40 years of age, stout and healthy, has had gonorrhœa and was under a surgeon's care for nine months for stricture of the urethra. The mode of treatment was dilatation, but he did not improve under that treatment and requested me to examine his case. I examined his urine under the microscope and found bacteria in abundance, and his urine ammoniacal. I washed out his bladder twice with carbolized water, which entirely relieved him.

Mr. H.—, twenty-three years of age, single, had gonorrhœa two years ago. Says he has gleet and "the doctors can't cure him." He has been under treatment from physicians of his place for over a year, and is no better. I examined his urine and found it ammoniacal, and it contained mucus, blood, pus and bacteria. I washed out his bladder with carbolized warm water, and a quantity of mucus, blood and pus came away. I continued the stream of water until it came away as clear as when it entered the bladder. Three weeks treatment with washing out the bladder and a slight diuretic relieved him.

My friend, Dr. J. W. Pritchett, corresponding Secretary of the Kentucky State Medical Society, and ex-President of the McDowell Medical Society, has treated a number of cases of irritable bladder successfully with this instrument, that had resisted all other means employed.—Dr. Ross. in *Am. Med. Weekly*.

THOMAS KEITH ON OVIARTOMY.—It is never too late to notice the words of Thomas Keith on this subject. Especially are they of interest now. Since of late, discussion has been rife in certain journals as to whether he has abandoned the use of antiseptics in ovariectomies or not. This pamphlet contains his latest utterances, and they may be summarized as follows. During fourteen years prior to the use of antiseptics, the mortality in two hundred and thirty ovariectomies was nearly one in seven. In the year before the spray was used, in twenty-one cases, but one died. Of the entire number, only two had a temperature of 103°. Of the first eight cases after using the spray, there were two deaths; then eighty successful cases. The spray solutions were weak. Then a five per cent. solution was used. Immediately it was noted that the temperature often rose above 103°, even to 107°. Finally he came to the conclusion that this rise was due to absorption of carbolic acid. Whilst using the spray, he had not drained as often as before. Lost a case from acute septicæmia. The

next case, though very similar, recovered, the spray and drainage having been both used. Finally, four cases had hæmorrhage from the kidney; two of them died from pure carbolic poisoning. He was himself repeatedly ill from effects of poisoning, even to hæmorrhage from kidneys. So, after two years' faithful trial, he gave up the spray. He doubts if it is of any use whatever in ovariectomy. Since, he has had twenty-six cases without a death, without a temperature much above 100°. His present practice is to use sponges, usually disinfected by a one in twenty solution of carbolic acid, often only put in hot water. The ligatures are of silk for the pedicle, and deep sutures of horse-hair for the superficial. The wound is carefully closed; is not looked at for a week, and then is generally healed. It is covered with carbolized gauze softened with glycerin, a layer of cotton-wool, a flannel bandage. Where there were extensive adhesions, and where the abdomen cannot well be cleansed, he drains. If there is not free drainage, he introduces a syringe through tube, and sucks out. Drainage tube, in general, removed in forty-eight hours. Since substitution of ether for chloroform, he has had scarcely any prolonged vomiting. The patient is in bed for a fortnight, sitting up in a week or ten days. The incision should be as small as possible, always, however, long enough to admit the hand. As to the time for operating, if a patient has a tumor, "if it is to come out, better have it out without loss of time." He taps a great deal; likes it. Only danger is from hæmorrhage, and this is lessened by using a small needle. Exclusive of cysts of broad ligament, he has tapped perhaps a dozen small cysts, and cured by tapping. Adhesions come from imperfect tapping. He makes no injections into cysts. Generally cauterizes the pedicle, though of late has been using silk ligatures a little. For the purpose of looking into the abdomen to see if all is clean, he uses a reflector, and finds it invaluable.

The question of removing fibroids is in same condition ovariectomy was twenty years ago. The rapidly growing ones in young women should be removed. Fibrous cysts should be taken out as soon as possible. Fibroids growing by pedicle from fundus he never touches, because they don't kill. Internally ergot is of service. Has operated nine times, with eight recoveries. The one fatal case was due to carbolic poisoning.

As for extirpation of the uterus for malignant disease, he has had no experience. You rarely see them in time, and if you do operate, the disease would return.—*American Practitioner*.

MOVABLE LIVER.—Science has recorded ten cases of movable liver, all pertaining to the feminine sex, and so clearly described that, notwithstanding the absence of anatomical verification,

there can be no doubt as to their authenticity. The displaced organ floats in the inferior region of the abdomen, easily recognizable by its form and volume, and can without difficulty be replaced in the right hypochondrium. The laxity of the suspensory ligaments which permits of this condition is always consecutive to repeated pregnancies, but in the case we are about to relate there is a new element, viz., incurvation of the vertebral column due to Pott's disease.

The subject, a woman æt. 50 years, relates that in her youth she was healthy, menses at 16, and became suddenly hump-backed at the age of 28 years without any symptoms of paralysis. She has had seven children—the last at the age of 41 years. Two of her confinements presented anomalies. During her last pregnancy she entered the hospital with an icterus which was qualified as catarrhal, and which appears not to have coincided with displacement of the liver. The labor was tedious—shoulder presentation—child lived. Since that time the patient has complained of dragging pains in the right side, with the characteristic sensation of an intra-abdominal mass, according with the movements of the body in the lateral decubitus. The discomfort occasioned by this state of affairs has been so great as to incapacitate her for work and necessitate her entrance to the hospital.

The patient is of slender figure. The vertebral column deviates to the left, with posterior convexity. The deformity is confined to the inferior dorsal and lumbar region. The thorax appears well formed in front, but its inferior right border rests almost directly upon the crest of the ilium. Percussion elicits pulmonary resonance down to the sixth rib; then in place of the hepatic dulness, there is tympanism, which increases from above downward.

The abdominal wall is flabby and pendant. A little below the umbilicus one sees a transverse projection, constituted by the sharply defined border of a tumor, moderately consistent, easily movable from right to left. At the junction of the right two-thirds with the left third there is a deep notch. The tumor is smooth, flat on percussion, and does not follow the movements of the diaphragm. It is the liver which has become movable in the abdomen. It is found impossible to replace it in the right hypochondrium because of the dorsal and thoracic deformity. All the functions are normal. It is an acquired infirmity rather than a pathological condition, and the patient is afforded appreciable relief by means of a well-made belt.—*Archives Generales de Medecine*, July, 1882.

OPHTHALMIC APHORISMS.—Dr. J. J. Chisholm, of Baltimore, gives the following valuable aphorisms in a report presented to the Maryland State Medical Society at its last session:

1st.—*Do not blister.* In forty-nine applications

out of fifty, as I find it used by physicians at large, it is an additional and useless torture to the eye disease from which the patient is already suffering.

2nd.—*Do not use nitrate of silver.* As constantly prescribed by general practitioners, it is not beneficial in one case out of one hundred, and therefore is a very painful infliction to the ninety-nine who would have been so very much better off without it.

3rd.—*Do not prescribe sugar of lead.* In every case zinc, tannin or alum is better, and then there is no fear of having insoluble deposits incorporating themselves with the exposed surface of corneal ulcers.

4th.—*Always use weak solutions of the mineral and vegetable astringents* in the treatment of eye inflammations which attack the mucus surfaces, and restrict their application to conjunctival diseases exclusively. One grain of alum, sulphate or chloride of zinc, sulphate of copper or nitrate of silver, in an ounce of water, will in the majority of cases of conjunctival diseases, do much more good and give much less uneasiness than the very painful five and ten grain solutions which are so often injuriously prescribed by physicians.

5th.—*Solution of the sulphate of atropia*, from one to four grains to the ounce of rose water, is an essential eye-drop in the treatment of acute iritis, to break up newly formed adhesions. One drop of the atropia solution in an inflamed eye is a most valuable means of establishing the diagnosis whether iritic complications exist or not, and should be used in most cases of eye inflammation to find out whether there are any adhesions of the pupil to the lens.

6th.—*Eserine in solution of one grain to the ounce of water* is the remedy for purely corneal lesions.

7th.—When physicians are in doubt as to the character of an eye disease, they should seek a consultation from specialists who are more familiar with eye diseases than general practitioners can possibly be. Such timely aid often saves the patient a lifetime of trouble.

If physicians would commit to memory and keep at their finger ends, and ready for use, these simple aphorisms, the amount of mental and bodily suffering which they will prevent in their eye patients is beyond calculation. While all good rules have necessary many exceptions, they may safely follow their simple guidance.—*Ohio Med. Journal*.

IODOFORM DRESSING IN VIENNA.—In the general Hospital, Billroth, Albert, Dittel, Weinlechner use it, and so also do the surgeons in the other large civic and military hospitals here. In Billroth's clinic I have not seen the spray used once. The part to be operated upon is scrubbed with soap and carbolyzed water, and then carefully carbolyzed again. The requisite operation is then made. All the instruments are laid in carbolyzed water, the

sponges also, and before dressing, the wound is thoroughly irrigated with a three per cent. solution. It is then dressed with iodoform gauze instead of the Lister gauze, with no intervening protective. Over the gauze is usually placed a moderately thick layer of absorbent cotton, and then something corresponding to the Mackintosh over this. The whole is then closely and neatly bandaged; the bandage used being quite wide and made out of strong gauze.

If advisable, the wound may be dusted with powdered iodoform. In subperiosteal amputations it is dusted in many cases under the periosteum; in osteo-plastic resections, likewise, between the ends of the bone, and after extirpation of tumors many would sprinkle it upon the inner surface of the flaps. The drainage tube is much less resorted to now than when the strict Lister dressings were used; there being less need for it. Under the influence of iodoform there is much less suppuration, and whatever discharge takes place is more of the nature of a serous exudate. Indications for change of dressing are much as they were under the regime of Lister. An absolute indication for change is an elevation of temperature after it has been for several hours or days normal. Relative indications for the same are pain, and burning and itching in the part as they may seem to call for it.

Inasmuch as iodoform has an actual pain-stilling effect, which is, of course, in its favour, these latter symptoms occur comparatively rarely, and are largely the result of tight or improper bandaging.

Certainly, as an antiseptic, iodoform must rank ahead of carbolic acid. Further than this it undoubtedly promotes absorption more rapidly than any other medicinal agent. And for this reason it is very largely used by the syphilologists and dermatologists here for hastening the subsidence of buboes and of scrofulous adenoid enlargements. They inject it in ethereal solutions; and for the most part with excellent effect.—*Dr. Park, Annals of Anatomy and Surgery.*

ANTISEPTICS IN TYPHOID.—In his service at the Hotel-Dieu, Vulpian has made some comparative observations on the utility of the various antiseptics employed in typhoid fever. Iodoform has not given any good results. This is the more remarkable, since this agent now occupies an important place as a remedy in septic processes. Salicylate of bismuth is an excellent antiseptic, but it is not readily soluble, and hence the large dose necessary to obtain any result—from two to three drachms daily—presents many inconveniences. It is found, also to increase the tendency to nasal and intestinal hemorrhage. Boracic acid, carried up to the dose of three drachms daily, by regular increment of the daily dose, has not done any good. The best results have been achieved

with salicylic acid. Vulpian has administered this in doses of three or four grains every half-hour until the daily quantity has reached the large proportion of three drachms. In some patients, especially in young men, he has produced some cerebral disturbance—a light delirium—in others albuminuria has appeared; but this is by no means an uncommon symptom in typhoid when left to its own course, and in some cases the albuminuria disappears when as much as 200 grains of salicylic acid are taken daily. The real cerebral effect which may, then, be referred to salicylic acid, is a slight delirium. Under the salicylic-acid treatment the temperature falls in forty-eight hours, three to four degrees; and this reduction of the body-heat is more persistent than that effected by carbolic acid. At the same time there ensues a notable amelioration of the general condition of the patient. But Vulpian does not pretend that the mortality from the disease, nor its duration, is notably diminished by the modification in its symptoms thus effected by salicylic acid.

In the course of the discussion on Vulpian's observations, it appears that the central idea of the antiseptic treatment of typhoid is to act on the typhoid germs introduced into the intestinal canal from without. Vulpian gives the preference to salicylic acid because it possesses so little toxic activity *per se*. He objects to the use of the carbolate of sodium for this purpose, because, owing to its solubility, it cannot be accumulated in the blood in sufficient quantity to act on the disease germs. The treatment by purgation during the period of invasion—the prodromal stage—was also considered. One of the modes of the "specific treatment" of typhoid, as pursued by our German colleagues, is the mercurial plan, which consists in the administration of purgative doses (ten grains) of calomel during the first week. Several doses of this kind must act in three ways: sufficient bichloride is produced to act on the typhoid germs as a poison; the germs are removed by a purgative action; the temperature is lowered by the combined result of these actions. The range of temperature has a certain relation to the number and activity of the germs present in the blood. Hence their destruction at an early period becomes very desirable.—*Med. News*, Oct. 14, 1882.

THE NON-IDENTITY OF CROUP AND DIPHTHERIA.—Dr. McGillvary, of Sydney, N. S., writes to the *Philadelphia Medical News* as follows, in regard to the above subject:—In your issue of October 21, there appeared a lecture delivered by Dr. Morell Mackenzie, of London, at Bellevue Hospital Medical College, on "Diphtheria." In that lecture the learned Dr. pronounced croup and diphtheria one and the same disease. This is an utterance *ex cathedra*, and deserves more than passing notice.

I do not think that the *ipse dixit* of this distinguished authority is sufficient to establish his doctrine of identity in regard to those hitherto considered separate diseases. But he goes farther, and states: "I believe though, after all, it is a mere theoretical question." I think it is very much more, not as far as the medical treatment is concerned, but it is of very great importance in regard to the question of contagiousness.

Diphtheria has been regarded as a most contagious disease. Croup has not been so regarded. In the one case it has been the rule to isolate the patient, quarantine the family, and exclude the other children, if there are any, from the public schools for a certain specified time. In the other case there has been no isolating, no quarantining, or limitation of personal freedom. If these diseases are identical, why this exhibition of inconsistency, why this wanton trifling with human life in the neglect of proper precautionary measures? If the members of the medical profession are to be regarded as the guardians of the public health, this question of the identity or non-identity of these diseases is of much more importance than a merely "theoretical question."

During an active practice of twenty years I have had quite a number of cases of membranous croup under my care. During ten of these years there has not been a case of diphtheria in the district, yet during these years an occasional case of true croup would appear, and in none of them was any attempt ever made to prevent the spread of the disease. Yet no second case ever occurred in the same family, nor were any other members of the household afflicted with sore throat of any kind near the time when the cases of croup arose.

In some of the cases that proved fatal, there were quite a number of other little children in the same family. These had constant access to the bed of the suffering one, and after death for two or three days, while the body remained in the house, these little ones would hover around where it was lying, and many fond kisses were showered on the loved form, and yet I have never had a second case in the same family. On the other hand, I have had cases of diphtheria when every effort was put forth to prevent the spread of the disease, and while I might now and again succeed, yet in the large majority of cases the disease would spread in the face of all that I could do.

Now with facts such as these before me, and my experience does not differ from that of many others, is it any wonder that without something more than mere assertion I should still very respectfully maintain that croup and diphtheria are *two* and distinct diseases, the one a highly contagious disease, the other not in the slightest degree contagious.

In order to save the profession from well-merited reproach an account of so much diversity of opinion on this subject cannot a Medical Commission

be appointed to deal with this matter and to arrive at some definite finding?

ATROPINE IN MANIA.—Dr. J. R. Gasquet (Lond. Pract.) finds atropine useful in cases which had been previously benefited by hyoscyamin. He recommends the drug on account of its comparative safety and cheapness.—*Journal of Mental Science*

PERFORATING DUODENAL ULCER.—John P., aged thirty-four, a coachman, and a well-built, active, muscular man, apparently in robust health, consulted me in November, 1881, having been suddenly seized with agonizing pain in the right hypochondriac region, extending downward and to the back. The pulse was slow, of good strength; the skin cool, and in twelve hours he was free from pain. Morphia was injected subcutaneously. During the succeeding six months he had occasional attacks of abdominal pain and sickness, not however, of such severity as to induce him to seek medical aid or to interfere with his work. While in the act of stretching himself to hang a picture, on the evening of April 23, 1881, about an hour after a meal of tea and bread-and-butter, he was again suddenly seized with the same pain as before, and when seen was in a chair, moaning, with the knees drawn up, pale, with a cool skin and a slow but not weak pulse. Bowels had acted during the day. Morphia was again injected with but little relief, and by the following evening he was in a state of profound collapse, and died in twenty-four hours after the seizure.

The abdomen was examined twenty-four hours after death. Rigor mortis complete, with great lividity of surface and rapid decomposition. On opening the abdomen, fetid gas and about two quarts of turbid brown fluid, with yellow floating shreds, escaped, and on raising the transverse colon a round perforation, half an inch in diameter, was seen in the duodenum, which was perfectly free from adhesions. The omentum had limited to some extent the spread of the peritonitis, but there was much soft yellow lymph on the liver and the adjacent bowel. On removing the duodenum, the opening was seen to have a thick rounded margin, firm to the touch, surrounded by folds of mucus membrane radiating from it.

Three years ago George S., aged thirty-six years, while jumping on the hind step of a high gig, was seized with extreme pain in the abdomen, and faintness. When seen by me he presented the phenomenon of collapse in the most intense degree, and for about six hours showed no sign of rallying. Gradually the pulse became perceptible, and warmth returned, but the abdominal pain was extreme, and for three days he lay in a dangerous state. In eight days he had recovered sufficiently to be removed to his home, a distance of some miles, and when heard of six months ago was alive and well. Previously for some months he had occasional at-

tacks of abdominal pain, which he attributed to "cramp"—*W. Henderson, M.B., Glasg. in The Lancet.*

METHODS OF AMPUTATION.—Prof. Stokes in his Address on Surgery, at the meeting of the British Medical Association, reviewed the different methods employed by different surgeons. According to Von Langenbeck Trelat, and others, the preservation of the periosteum is attended with advantage. The formation of a periosteal curtain to cover the cut surface of the bone and its medullary canal is believed to act as a shield or barrier against septic agencies, and diminish the chance of the occurrence of some of the secondary calamities, notably osteomyelitis, following amputations. The method he has in some instances adopted, and with success, is, making a somewhat quadrilateral-shaped flap at the membrane and letting it fall over the cut surface of the bone. Another method, that of M. Trelat, is to detach the membrane all round the bone for fully an inch below the point where the bone had to be divided, making, in fact, a sleeve-shaped flap. This plan must, however, materially protract the operation. This led him to consider some other comparatively recent improvements in the operation of amputation, and to bear his testimony to the great advantages to be derived from the adoption of the principle of long anterior flaps, the chief credit for establishing which belongs to the late Mr. Teale, of Leeds.

Gritti's operation undoubtedly owes its parentage to that of Carden; but, although the retaining of the patella and consequent preservation of the normal attachments of the extensors of the leg is a plan as good as it was original with Gritti, still the details of this method prevented the realization of those advantages which in principle it embodied. Hence the modification which Mr. Stokes terms "supracondyloid amputation"—an operation which retaining the advantages of Gritti's method, eliminates its effects by lengthening the anterior flap, forming a posterior flap one-third the length of the anterior one, saturating the patella and femur together, and, lastly, and most important of all, by making a high femoral section, but one not involving the medullary canal. The special advantages that may be claimed for supracondyloid amputation are:

1. That the posterior surface of the anterior flap being covered with a natural synovial membrane, the chances of suppuration and purulent absorption are diminished.

2. Any possibility of the split patella shifting from its place on the surface of the femur is prevented by the high femoral section, and by saturating the two bones together.

3. The vessels are divided at right angles to their continuity, and not obliquely, as in other flap operations.

4. The existence of a posterior flap diminishes the chances of any wide gaping of the wound; while the anterior flap, being oval, increases the chances of the stump tapering gradually towards its extremity and assuming the form of a rounded cone.

5. The preservation of the abnormal attachments of the extensors of the leg.

These advantages embody those of both flap and circular amputation of the thigh, and, at the same time, eliminate the defects.—*Brit. Medical Journ.*, August 12, 1882.

INFLUENCE OF OCCUPATION ON SYPHILIS.—A paper recently read before the National Society of Medicines, of Lyons, by Dr. Guinard, on this subject, excited considerable discussion, from syphilographers and others, at the time. From a review of the question discussed in it, as to the hygiene of glass-blowers and the prophylaxis of syphilis, in the *Archives of Dermatology*, we learn that RivedeGier, which is to-day, from the industrial point of view, the first and principal centre of the manufacture of glass in France, was twenty years ago, from the medical point of view, the first and principal centre of observation of syphilis transmitted by glass-blowing. It was upon a workman in one of its factories that M. Rollet first recognized and demonstrated, in 1850, the contagiousness of secondary lesions. That abundant opportunity for direct syphilitic infection is furnished by glass-blowing, is shown by the statement that three workmen pass the same tube from mouth to mouth 75 to 85 times hourly. Three epidemics produced in this manner are described in detail. In order to guard against their recurrence, bi-monthly inspections of all the workmen were instituted in some establishments, no one being employed without presenting a certificate of health from the physician in charge. These examinations, although successful in preventing further symptoms, being objected to by some of the workmen, the attempt was made to introduce the use of movable mouth-pieces for the tubes one being furnished each workman. Although this device seemed to answer the purpose at first, it was soon discovered that the men would not use them, and the occurrence of several new cases of buccal chancres caused the bi-monthly inspections to be resumed.—*The College and Clinical Record.*

THE ABORTIVE TREATMENT OF GONORRHOEA.—Believing that gonorrhœa is due to parasites, Dr. W. Watson Cheyne (in the *Lancet*) contends that the proper method to abort the disease is to destroy the parasites. The materials which he employed with the view of destroying the cause of gonorrhœa were chiefly iodoform and eucalyptus oil, and these he still uses. As injections are apt not to penetrate sufficiently far, and as their effect are only momentary, he combines these sub

stances with cocoa butter, and makes them up in the form of solid rods about 4 in. or 5 in. in length, and about the thickness of a No. 10 catheter. These rods weigh forty grains each, and each contains five grains of iodoform and ten minims of eucalyptus oil, introduced into the urethra, over the orifice of which a pad of boracic lint is applied, and outside this is a large piece of gutta percha tissue, the whole being fastened on by strapping, and retained for four or five hours, if possible. The cocoa butter soon melts, and a solution of iodoform in eucalyptus oil bathes the mucous membrane for some hours. Another rod may then be inserted, and a suitable injection be employed afterwards. This method is only of use, in his experience, before or during the inflammatory stage, and he employs it at any time till the inflammatory symptoms have disappeared, but generally within the first seven or eight days after the commencement of the discharge.—*Medical and Surgical Reporter*.

A NEW METHOD OF DETECTING SMALL STONES IN THE BLADDER.—Dr. S. Cuthbertson Duncan has used for about three years the following method of detecting stone when small or in fragments. He takes a nickle-plated sound, such as is used for that purpose, and holds it over the flame of an ordinary lamp or candle until the point is covered with a thin, black film. After it has become quite cool, it is dipped in a solution of collodion and allowed to dry. He then oils it with castor oil, and introduces it a short distance in the urethra and withdraws it to see if it be injured. If not he proceeds to explore the floor of the bladder with a sweeping lateral movement. If there be a stone or any fragments left after lithotripsy, its black covering will be removed in patches, and the bright metal show through. The author thinks this more delicate than Napier's indicator, the point of which is made of lead, blackened by chemical agents; and this very method does not impair the conducting power of the sound in any degree. A short beaked solid steel sound is preferred, with a round handle, which has a flat disk about two inches from the end, at right angles to the curve of the beak, to serve as a guide for the direction of the point. The round handle allows it to be rotated between the index finger and the thumb, the most sensitive part of the hand—two things necessary for rapid and delicate manipulation.—*British Med. Journal*.

A VICTORY OF SCIENCE.—A child nine years of age suddenly disappeared at Alexandria during May last. A short time afterwards his body was found drowned, and the Greeks accused the Jews of having killed Evangeli Fornaraki, after they had taken his blood for their religious rites. It was asserted that the supposed victim had incis-

ions on his tongue and his wrists. An international medical commission was appointed to perform the *post mortem* examination, and this body decided that Evangeli Fornaraki's death was from drowning; that there were no wounds nor trace of wounds on his body. A Greek doctor, M. Counomopoulos, questioned the decision of the commission, refused to accept it, and affirmed that the child's death was not owing to submersion, but to an act of violence, probably strangulation. The Israelite community was in a perilous condition, and appealed to the arbitration of M. Brouardel, the well-known professor of medical jurisprudence, who testified to the absence of the slightest trace of violence, and endorsed the opinion of the commission. He pointed out that, the body having remained fifty hours under water, and having been subsequently exposed to the air during twenty-four hours, there was considerable putrefaction, which modified the symptoms of asphyxia due to submersion, and evident shortly after death; but those that were still present sufficed to show that death resulted from drowning.

WIRE LIGATURES FOR DIVIDED BONES—Dr. T. Sympton records two cases in the *British Medical Journal*, wherein he obtained excellent results in approximating divided bones with wire ligatures. The first case was a crushed foot; he amputated according to Pirogoff, and fastened the os calcis to the tibia by iron wires. The operation wound was completely healed in ten days, but the wires were left in six weeks. The second case was a resection of the knee joint. The femur and tibia were brought firmly together by two iron wires, one on the outer, the other on the inner aspect; a most complete union was obtained. The operations were performed under antiseptic precautions, and the wire caused no irritation. It is desirable that the apertures made by the drill should be at least a quarter of an inch from the sawn surfaces, and that these surfaces should be very accurately approximated by twisting together the ends of the wires; not more than twice, however, otherwise difficulty will be experienced in removing them. Iron wire, such as that used for the stiletts of elastic gum catheters, in size about No. 22 of the gauge, will usually be found the best.—*The Med. and Surg. Reporter*.

SULPHUR IN WHOOPING COUGH.—Dr. Luton recommends in the treatment of whooping-cough, especially in the convulsive period, the administration of sulphur. Flowers of sulphur 8 to 15 grains, sugar of milk 16 grains—in ten powders, one every two hours; carbonate of iron should be given to keep up the strength, ten grains in the day. Coffee renders good service, and an emetic should be given every two days. Belladonna, which has been considered the most efficacious

remedy in this disease, has been given by Trouseau as follows:—Ext. belladonna four grains, syrup of poppies and simple syrup of each one ounce; one to eight tea-spoonful to be given in the twenty-four hours, according to age. Dover's powder associated with extract of hemlock has been frequently given with the best results in the formula:—Dover's powder one grain, extract of hemlock in powder one grain, ginger in powder two grains, and sugar four grains, the whole to be given at bed-time, for a child of two years.—*Medical Press.*

AN ALKALOID FROM THE LILY OF THE VALLEY.

—Prof. Germain Sée has brought to the notice of the Academy of Medicine a new substance which promises to be of great therapeutic value. It is an alkaloid extracted from the *Convallaria majalis*, or the lily of the valley. This new alkaloid has been discovered by Dr. Hardy, an eminent chemist, who also discovered the alkaloid from the jaborandi, to which he gave the name of "pilocarpin." Convallarine, the name of the new substance, has been experimented with by Prof. Sée, at the Hôtel Dieu, in conjunction with Dr. Hardy, of which hospital the latter is the *chef du laboratoire*. Its therapeutic action is compared with that of digitalis, for which it may be with advantage substituted, as it has none of the inconveniences attributed to digitalis. Dr. Hardy was led to make researches with this plant from the fact of its being generally used by the peasants in Russia, who employ the herb in dropsies, and in all cases requiring increased diuresis. According to Prof. Sée the convallarine is a powerful diuretic, and it has a marked influence on the contraction of the heart, which it regulates, while it lowers the pulse in a remarkable manner.—*Lancet.*

PROPER WAY TO GIVE ACONITE.—In the *London Medical Record*, Dr. William Murrell makes some judicious observations on the correct plan for administering aconite so as to secure its most advantageous action. He observes that aconite does act best in small doses frequently repeated. Many practitioners get no good from aconite because they do not know how to use it. The dose of the tincture recommended in the British Pharmacopœia—from 5 to 15 minims—is absurdly large, and no one with any regard for his patient's safety or his own reputation would ever think of giving it. The best way is to put half a drachm of the tincture in a four-ounce bottle of water, and to tell the patient to take a teaspoonful of this every ten minutes for the first hour, and after this hourly for some hours. Even smaller doses may be given in the case of children. The great indication for the use of aconite is elevation of temperature; the clinical thermometer and aconite bottle should go hand in hand. If properly used,

aconite is one of the most valuable and indispensable drugs in the Pharmacopœia.—*Kansas Med. Index.*

COOLING WATER.—A simple contrivance for cooling water has been invented by M. Toselli, of France. It is described in *Les Mondes*, and consists of a cylindrical cup for holding any liquid, into which may be plunged an inner goblet shaped like an inverted truncated cone, and having a lid that rests upon the outer cup. Putting one hundred and fifty grams of nitrate of ammonia in the inner goblet, filling it with cold water, and stirring it so as to hasten the solution, the temperature of the outer liquid is soon reduced to at least 12° C., or 28° F. The salt may be used for an indefinite period by spreading it upon a plate after each trial, and exposing it to the sun until it crystallizes anew. The inventor prepares a salt which will lower the temperature 28° C., or 50° F., in the warmest countries.—*Louisville Med. News.*

WOUNDS OF THE HEART.—A recent leading article in the *Lancet* shows the fallacy of many popular and even medical opinions respecting the absolute fatality of wounds of the heart. According to this article there is no case of absolutely instantaneous death from cardiac wounds. Wounds of the apex only kill within an hour after the wound has been inflicted. In one instance cited, a man lived twelve hours after the heart had been bisected by a sabre. Out of twenty-nine cases cited in the article in question, only two died within forty-eight hours after receiving the wound. The others lived from four to twenty-eight days; death resulting in most cases from unavoidable complications. Recovery may take place even when the wound is extensive for a bullet has been found imbedded in the muscular wall six years after the receipt of the injury; the patient dying from a disease entirely disconnected with the cardiac wound.—*Chicago Med. Review.*

THE EASY PREPARATION OF CATGUT LIGATURES.

—Whether one pins one's faith to the antiseptic system or not, the use of catgut ligatures is so important and so general that we call attention anew to the simple method of preparation which Mr. Lister introduced and published last year. Any doctor can prepare them for himself within a couple of days, and keep them constantly on hand.

Add one part of chromic acid and 200 parts carbolic acid to 400 parts of water. To this mixture (as it undergoes change in a short time) add immediately 200 parts of catgut of suitable thickness. After soaking for forty-eight hours, dry the catgut and place it in a mixture of carbolic acid and sweet oil, a drachm and a half to the ounce (1 to 5), in which it may be kept indefinitely.—*Medical News.*

SINGULAR LEGACY TO THE FRENCH GOVERNMENT.—M. Giffard has left to the French government a singular legacy. He desires that it shall be devoted to the establishment of *suicidaria*, or national institutions, in which persons suffering from painful and incurable affections shall be allowed by the use of chloroform and other such agents, to terminate their suffering under the direction of medical experts and with the consent of their friends. M. Giffard secured euthanasia for himself by means of a special apparatus which he devised for inhaling chloroform. M. Renaud has joined the movement for the promotion of painless suicide in France, only stipulating that no man shall be by law entitled to take his own life until he has obtained the consent of his family.—*Brit. Med. Journal*.

THE TREATMENT OF RINGWORM.—A writer in the British *Med. Journal* says:—The difficulty experienced in the treatment of ringworm is known to every one who has seen much of this disease. I therefore think your readers will be glad to hear of a remedy which I have recently used with complete success. Struck with the similarity that exists between the disease known in the East Indies as *dobzitch* and ringworm, and knowing how rapidly the former yields to the application of goa powder, I was induced to try the active principle of this substance, chrysophanic acid, in the proportion of one drachm to one ounce of vaseline. The result has been the rapid destruction of fungus, and consequently a complete cure. Chrysophanic acid has been recommended in the treatment of psoriasis, but I am not aware of it having been used hitherto for ringworm.

HOW TO USE FILIX MAS.—The success of certain German "worm doctors" in using extractum filicis led Herr Dietrich to suppose that the best results are obtained when castor oil is administered immediately after the extract, instead of waiting an hour or two, the extract being more likely to reach the worm undecomposed and less likely to irritate the stomach during its rapid passage. Upon experiment this was confirmed (*Pharm. Zeit.*); in fact, the most favorable results were obtained when the extract and oil were administered together. This, according to Herr Dietrich, is most conveniently done in flexible capsules, each containing 1 gramme of extract and 2 grammes of oil. A dose consisting of six such capsules, preceded as usual by a laxative, has been found quite effective.—*Med. Press and Circular*.

A SUCCESSFUL CASE OF TRANSFUSION.—We are any of us liable at a moment's notice, to be called to one of these dreadful cases of post-partum hemorrhage, and it is comforting to hear of such success as Dr. William Walter records in the *British Medical Journal*. The patient was lying

still and unconscious, lips and face blanched, her eyes had assumed a dull and lifeless appearance, her pulse could be felt only at intervals, her extremities were cold and clammy. It was with great difficulty that a vein could be discovered. About four ounces of defibrinated blood were injected. Almost immediately respiration became distinctly visible and audible. In a quarter of an hour she became conscious. Her recovery progressed without interruption.—*Chicago Med. Review*.

TREATMENT OF MEMBRANOUS DYSMENORRHOEA.—Dr. Orsby (*New York Med. Record*) gives five cases of painful menstruation, accompanied by the shedding of flakes of membrane, successfully treated with calomel in combination with opium. His formula is as follows:—*R.* Ext. opi, six grains; hydrarg. chlo. mit., twelve grains. Divide in twelve pills, one to be given every four hours till the gums are affected. He regards the known efficacy of mercury in all forms of hyperplasia, acute and chronic, as justifying *a priori* its exhibition in a complaint in which the hyperplastic element is recognized by pathologists and his practice has completely confirmed this view. Calomel has been the only salt of mercury tried, as it produces its effect rapidly with little irritation.—*Chicago Med. Review*.

ATROPINE IN THE TREATMENT OF EPILEPSY.—Dr. David advises the treatment of epilepsy by the simultaneous employment of atropine and the bromides of potassium and ammonium. For a period of six months, he orders twenty grains of the bromide of ammonium—thrice daily. At the same time the patient is instructed to take a granule of one milligramme of sulphate of atropine morning and evening. At the end of six months the following pills are prescribed:—

Valerianate of zinc..... 4 centigr.
Extract of belladonna..... 6 milligr.
Arsenious acid..... 2 milligr
Extract of gentian..... q. s.

Two of these pills are taken daily during twelve months. Should the faintest symptom of the threatened occurrence of the epilepsy appear the treatment must be kept up for yet another twelve months.—*Lyon Medical*.—*Glasgow Med. Journal*.

MEDICAL EDUCATION IN THE UNITED STATES. The Annual Report of the Commissioner of Education, for the year 1880, has just been issued by the Government, and from it we learn that during the last decade the number of medical institutions, and of medical students in the United States has about doubled, and that the number of instructors has nearly trebled.

The number of "regular" schools is put down at 72, with 1,131 instructors, and 9,876 students.

The "Eclectic" schools number 6, with 65 instructors, and 833 students. The "Homœopathic" schools number 12, with 188 instructors, and 1,220 students. *Med. News.*

TREATMENT OF INFANTILE DIARRHŒA BY POWDERED CHARCOAL.—Dr. Guérin, in referring to a recent communication to the *Académie de Médecine*, made by Bouchardat, remarks that for a long time he has been in the habit of combating infantile diarrhœa by mixing the milk in the sucking-bottle with charcoal powder. He usually adds half a teaspoonful of the powder to one bottle of the milk. The infants take the milk readily, and in a few days the greenish stools of the little patients change to a dark yellow, while their consistence becomes increased. In addition to the admixture of powdered charcoal, the milk is diluted by one-half or one-third of its bulk of sugared water. He has frequently seen intractable summer complaints yield in a few days to this treatment.—*Canada Med. Record.*

HIP-JOINT AMPUTATIONS.—During the past month three cases of amputation at the right hip-joint were performed in England, with the aid of Mr. Davey's lever for controlling hæmorrhage. A case where Mr. McLaren, of Carlisle, operated, lost two ounces of blood; a second patient, under Mr. Cowell's care, at the Westminster Hospital, lost three ounces; and the third case, where Mr. Paul Swain, of Plymouth, performed amputation, with the assistance of Dr. Bampton, lost but one ounce and a half. All these patients are progressing favourably.—*Brit. Med. Journal*, August 12th, 1882

THE SEA-SIDE SANITARY HOTEL OF THE FUTURE.—Anxious guest to hall-boy: "Boy, where are the water-closets?" "Hain't got any, sir; they breeds fever. Boat goes down the harbor every morning—Ladies at nine, gentlemen at ten." "Well, is dinner ready?" "No, sir. We always carbolize the dining-room before meals. Now they are spraying the waiters, sir." Impatiently: "Well, where is your ice-water?" "Tain't healthy. Yonder's our Labarraque mixture flavored to taste. Have a glass, sir?" Guest retires and takes a thymolized julep.

TRAUMATIC TETANUS TREATED WITH ESERINE.—A case of tetanus is reported in the *New Orleans Medical Journal* of a boy aged 11 years, who, being wounded in the foot by a splinter, developed the disease some three weeks afterwards. After chloral, cannabis indica, etc., had been used in vain, eserine, administered in $\frac{1}{4}$ grain doses every hour for several days, gave complete relief. The pupils were dilated on two occasions, but at all other times responded to light. The eserine in-

creased neither the tears, saliva nor defecation.—*Pittsburg Med. Journal.*

M. Dujardin Beaumetz recommends the combination of the bromides and chloral as being very useful in whooping cough. He gives one dessert-spoonful of the mixture in a glass of milk, to which the yolk of an egg has been added, evening and morning.

R Potassii bromidi, 3 ss.
Sodii bromidi, 3 j.
Ammonii bromidi, 3 ss.
Syr. chloral, 3 iss.
Aquæ. 3 ij.

THE CASE OF GUTEAU.—The *Boston Medical and Surgical Journal*, expresses in the following terms what we think will be the verdict of an enlightened posterity: "We feel it our duty to reiterate the opinion expressed by us from the first, that Guteau was an irresponsible lunatic, and should neither have been tried by an ordinary criminal process nor have been sentenced to death."—*Pacific Medical Journal.*

A NEW USE FOR SALICYLATE OF SODA.—Dr. Theo. M. Kendall writes to the *Lancet* that he derived most gratifying results in a case of severe chalk gout from the use of a lotion of ten grains of salicylate of soda to the ounce. By its use, chalky deposits in the ear were softened, and in four days disappeared, leaving only a small scar.

THE VACATION OF A SUCCESSFUL PRACTITIONER.—*Wife* (to doctor just home from a week's hunting). "Well, James, did you shoot anything?" *Doctor* (sadly).—"No. Awfully bad luck; never killed a thing."

Wife (who knows him—sweetly).—"My dear, you'd have done better if you had stayed at home."

A western professor who, according to the *Peoria Medical Monthly*, discovered the fact that the hair on the mons veneris of sterile women is always straight, was somewhat non-plussed on being asked by a student whether curling of the hair would not cure sterility.

The combination of ergot, belladonna, and iodide of iron is used at Bellevue Hospital, and proves more useful for incontinence of the urine than either of the drugs alone, or in any other combination which has been tried.—*Med. Digest.*

"I wouldn't be in Egypt," said Mrs. McGill, last week, "for all the wealth of Creosote." Seeing a look of astonishment in the face of her auditors, she added: "Creosote, you know, was an old Roman god, and everything he touched turned into gold."

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, DECEMBER, 1882.

The LANCET has the largest circulation of any Medical Journal in Canada.

THE GAZETA MEDICA AND THE UNIAO MEDICA.

Among our foreign exchanges there are none which we peruse with more gratification and instruction than the two Brazilian monthlies above-named, both of which, in the Portuguese language, are presented on excellent paper and in charmingly neat and clear type. We wish that we could say half as much in commendation of some of the numerous medical periodicals reaching us in our own tongue.

The July number of the *Gazeta Medica*, along with other highly interesting matter which gives clear evidence of the respectable status of medical education in the great Empire of Brazil, presents its readers with a full report of a "discourse by Dr. A. Pacifico Pereira, pronounced on the occasion of his assuming the chair of General and Pathological Anatomy in the Faculty of Medicine of Bahia, on the 15th of July last. Did our space warrant the indulgence, it would give us great pleasure to present to our readers this truly eloquent and instructive discourse in its entirety. We must, however, content ourselves with the reproduction of a few scattered excerpts, which will, we doubt not, prove acceptable to the readers of the LANCET, who will please bear in mind that they have been taken from various parts, which, in some instances are rather distant from each other.

"Modern medicine," says Dr. Pereria, "pursues its prospering march, encircled by the numerous cortege of the sciences, and the study of any of its branches cannot be actually accomplished, in a

regular manner, unless by those powerful means of observation and experiment, which penetrate the depths of organization, and unfold the mysteries of life even in the ruins of death itself. We are now crossing a phase of civilization and progression; the scientific movement, which to-day is manifested in all countries, is incontestably superior to that of all preceding epochs. We have the happiness of living under a rule which guarantees to science the free exercise of its rights, without the tyranny of absurd laws, or those fanatical conceits of exquisite sensibility which force the sage physiologists of England to leave their own country, in order to be able freely to proceed in their experimental studies by vivisections, and free from the persecutions of a senseless law and the continual prosecutions of protectoral societies against the so-called 'scientific torture of animals.' Never let us recall to life the times of the ancient Romans, those cultivated and compassionate spirits, who devoted their piteous horror to the infamous study of anatomy, but delighted themselves, within their vast amphitheatres, with the spectacle of Christians torn to pieces by savage beasts, or burning in flames which consumed their pitch-besmeared bodies.

"A short time ago the Minister of the Empire, with that enlightened spirit and profound talent which he has manifested in the brilliant reforms so masterly projected in his programme, used, in relation to the Faculties of Brazil, the following memorable words:—The instruction in our Faculties is characteristically superficial, *atechnical*; it is absorbed, and it is lost, in theories; it does not tend to awaken, in either the professoriate or their alumni, the spirit of investigation; it recommends to special careers, intelligences unprepared for specialties, and inundates the practical professions with individuals without real initiation into the arts and the applied sciences. It is therefore an urgent necessity to remodel the programmes, to infuse into the courses a truly scientific vitality, to excite in the process of instruction a creative enquiry, arousing throughout, by the side of vigorous practice, the continual exercise of methodical observation, the untiring use of experimental processes, the instruction of facts, of causes, of laws, of relations, and of the mode of execution in our laboratories, our clinics, our offices, our observatories, amphitheatres, museums, galleries of instruments and academic expositions. It is imperative that our Faculties should produce men capable of assimilating science, contributing to its progress, showing clearly its adaptation to the improvement of the conditions of our destiny, and opening to our country a new era of fruitful, reconstructive, independent labour."

It is practical instruction, generalized into all its classes, perfected in all its branches, developed in all superior studies, that gives to nations that

herculean force which rendered Germany an unsailable colossus against a nation which had been reputed the first military power in the world. It is science that protects life, organizes the means of defence and reparation, and multiplies into prodigies of activity and movement the physical forces which are latent in nature. It is from the laboratories, in which observation and experiment have been exercised, with the powerful aid of the innumerable instruments of precision which science now has at her disposal, that have arisen the greater number of those marvellous inventions which have enriched the arts and industries, and have rendered states prosperous, strong and respected. And when nations lavish the best part of their substance on instruments of war, which unprofitably depresses them, is not the development of our centres of instruction, which are the foci of light, and the fountains of public glory, power and prosperity, an object worthy of some sacrifice? None of the civilized nations to-day withholds the resources necessary for the creation or development of its teaching institutions, and among these none has a greater right to the protection of the State than the institutions of medicine. Medical education now exacts a very high degree of intellectual culture. Exalting itself in the social scale by the well known importance of its conquests, modern medicine, the daughter of the fugitive and criminal mother of the time of the Romans, holds to-day seats of nobility, resides in palaces, and walks in company with royalty. Illustrious princes, as Charles Theodore of Bavaria, the able ophthalmologist and operator, studies and practises medicine, honoring with his name the noble profession which has rendered his talents illustrious. Most able physicians, as Bacelli in Italy, and Paul Bert in France, have been elevated to the eminent position of first men in the State, and have framed profound and noteworthy reforms, that mark an epoch of progress throughout their country. The deep-rooted conceits of the old aristocracy, whose glories were reflected merely in the splendour of their arms, have vanished from those most noble seats which have been won by science. Science and old nobility are now joined in honorable embrace, as that of the celebrated German surgeon, Esmarch, with an illustrious princess of his country. Scientific notables have to-day the high respect of Sovereigns, and the interests of science merit their special preferences. When the celebrated Recklinghausen was invited to take the chair of Rokitsansky, in Vienna, with the inducements of the high remuneration of 10,000 florins, the Prussian government, anxious to retain the eminent professor at Strasburg, asked him what he desired in order to continue in the university, which he had rendered illustrious by his fruitful instruction. The sage microscopist only requested the erection of a pathologico-ana-

tomical institute in accord with his plans. It was necessary to alter the line of the fortifications of the city in order to raise this magnificent structure, which cost the State a million (of florins ?); but the government preferred this expenditure to the loss of its notable professor. What men have more brilliantly personified the scientific evolution of a country than Virchow in Germany, Botkin in Russia, Bacelli in Italy, and Bert in France, who have raised themselves to the prominent positions of prime politicians, moving with supreme distinction and unsurpassable vigor in their college chairs, in the tribune, and in the furtherance of those vast interests which are embraced in the real progress of a nation? Hippocrates, the Socrates of medicine, abandoning the merely speculative theories and vain hypotheses of the Greek schools, succeeded in placing the bases of science in positive data and observed facts. Galen, the man of the scalpel, the boldest experimenter—as Malgaigne has well named him—the laborious and untiring commentator of Hippocrates, although influenced by the dogmatism of the philosophy of Plato, proclaimed positive observation as the basis of all medical systems. In all the ages that followed, the experimental method was ever gaining ground, as the most reliable guide of medicine, in the investigation of the complicated phenomena of life. Harvey, the great reformer of physiology, who built up the true theory of the circulation, the basis of all modern scientific medicine, was the imponent example pointed to by the celebrated philosopher Descartes, in his famous discourse on the “Method of reasoning and of investigating truth in the sciences.” It was after repeated and confirmed demonstrations, during nine years, that the illustrious English physiologist raised, in 1628, his monumental work, which was outlined in his book *De Motu Sanguinis*. John Hunter, dissatisfied with the results of human and comparative anatomy, elevated it to the interrogation of the living in the creation of experimental surgery, that prolific instrument of verification and progress. One of the loftiest spirits of this century, the eminent Professor Billroth, has said, ‘I belong to the number of those who do not concede that there is any distinction of real value between the study of a natural phenomenon and its laws, and the study of the human body in a state of disease. There is, in my opinion, but one method of investigating nature and her laws, as also the physiological and morbid conditions of the animal or the human body. The task of the clinic is to employ this method at the bedside of the patient. The art of curing is the consequence, the final result of observation.’

“You are aware of the exceeding services which have been afforded to medicine by the microscope, that most potent instrument of study, equally indispensable to the physician and the naturalist. It

is to it that we owe the exact knowledge of the causes of many diseases, whose producing agents belong to the number of animal and vegetable parasites—the algæ and microscopic organisms—epiphytes and entophytes, ectozoa and entozoa, which are now known and described in pathological histology within contestable exactitude. Recent admirable labors on the etiology of tuberculosis, malaria, lepra, chyluria, and hypæmia, further attest the immense value of its services, and we draw some glory from having had some of these studies made in Bahia, which has been a very memorable phase in our history. We require not to demonstrate the importance of microscopic research in the study of embryology and physiology, and the advantages of microscopic diagnosis on clinical study; but it is, above all, in the study of hygiene and of legal medicine, that the microscope has afforded incalculable services, which States recognize as a most valuable guarantee to public health and justice. In countries most advanced, the sanitary police, with its thousands of agents, make microscopic examination of aliments, thus preventing many poisonous consequences and the transmission of diseases, as trichinosis, tuberculosis, carbuncle, and many other parasitic affections, whose causes histology has clearly demonstrated. In the microscopic study of the soil and the air, as well as of aliments, innumerable causes of disease have been discovered, and in pathology no other means has afforded more valuable contributions to the study of the mechanism of morbid processes.”

CAUSES OF CONSUMPTION.

With the view of obtaining information concerning the etiology of tubercular pulmonary phthisis, Dr. Playter of this city issued a series of questions to a large number of physicians in Canada and the United States. The questions related to the age, sex, temperament, occupation, general structure, habits, and ancestry of the patients. About 250 physicians replied, citing cases in practice, and the Dr. has prepared from these cases a concise report, which is before us, containing some valuable, practical information, and from which we gather the following:—The average age of the patients was 27 years; 46 per cent. were males, and 54 per cent. females: only 28 per cent. were married. The circumference of the chest was in every case much below the average of vigorous persons of the same height, being only 31½ inches; the average height being 5 feet 5½ inches. About 55 per cent. had light blue eyes and light hair, and the nervous temperament largely prevailed. Two-

thirds of the patients had been engaged in indoor, sedentary occupations, and spent but little time in the open air. Much the greater part of them had slept in small unventilated bedrooms, two in a bed; had not usually worn flannel next the skin, nor used habitually any form of bath. The general habits of nearly all had been good, and but very few had used alcoholic spirits to excess.

In the deductions drawn, it is stated that the “analysis of cases agrees with what statistics in Ontario and most other countries have taught us, viz., that consumption is much more fatal in the third decenniad of life,—between the ages of 20 and 30 years, than in any other decennial period—when the period of light-hearted, irresponsible youth has passed away, and the stern realities and responsibilities of life have to be faced and assumed; and, also, that more females than males die of the disease.” We had not before observed any statistics showing that much the larger proportion of those who die of consumption are unmarried. Of the cases herein reported, nearly three-fourths had not entered the married state. Though celibacy in these cases may have had but little connection with cause and effect, it is not improbable, the Dr. argues, that marriage, in certain conditions and certain stages of the disease, is unfavorable to the development of consumption. It appears from the report that any special influence or matter of a direct or specific hereditary character, as a factor in the causation of consumption in adults, or even in youths, is not of such constancy and importance as has been commonly supposed. In only a little more than one-half (53 per cent.) had any relatives been known to have died of the disease; and in not much more than one-third (36 per cent.) had any ancestors—parents or grandparents—from whom alone it could have been inherited, died of it. More than this in favor of heredity, as Dr. Playter states, could doubtless be said of scarlet fever and measles. But, in so far as configuration and structure of the body, and the relative size and vigor of different organs to each other are influenced by parentage, hereditary influence becomes a very important causative factor. Indeed about all that is inherited, he thinks, is want of general stamina from defective construction.

One of the most marked features, and perhaps the most important one, brought out in the analy-

sis of the cases, is the evidence that those who die of the disease under consideration have a small pulmonary capacity—a small, contracted chest. This is shown not only in the average of the cases, but in every case; in not one did the circumference of the chest even approximate that of a well developed individual of the same height and weight. According to the best authorities the circumference of the chest around or on a level with the nipples should be, for good development, equal to one-half the height, plus one-fifteenth the height, of the individual. The circumference of the chest, therefore, of one whose stature is 5 feet 5½ inches—the average height of the cases above reported upon—should be, according to that, at least 37 inches; whereas the average circumference of the chest in these cases was only 31½ inches, or only about five-sixths of that demanded by health and good natural development. In about half the cases the chest was flat as well as small in circumference. While persons with small lungs had long been looked upon with suspicion and regarded as being predisposed to pulmonary phthisis, we had not seen any statistics showing so conclusively that consumptives have so universally small a respiratory capacity.

In nearly all the cases the patients had been small or moderate eaters and had used but little oleaginous food except butter; they could not, it would appear, consume enough oxygen to utilize the digested products of a full diet, especially that containing much carbonaceous matter. Dr. Playter very properly suggests that this point should be taken into consideration before prescribing a highly carbonaceous diet, and may indicate why so many of this class will not readily tolerate cod liver oil and kindred remedies. But few suffered from indigestion; they could readily digest all the system could utilize with its small respiratory capacity.

The average weight of the cases reported was only 133½ pounds, while an individual 5 feet 5½ inches in height should weigh at least 140 pounds. Another marked feature in the analysis of the cases is, that nearly three-fourths of the patients had resided in a locality favoring a humid, cool atmosphere, confirming the results of the investigations many years ago of Drs. Buchanan and Bowditch, that dampness of soil, in a large measure if not wholly by giving rise to dampness of atmosphere, favored the development of consumption.

MEDICAL BANQUETS.

The annually recurring medical banquet has now come to be an established institution in nearly all the medical colleges in Canada, and is looked forward to with much interest and pleasure, by both students and professors. The custom is a good one, as it affords the faculty and students and a few friends an opportunity of spending a social evening together. The invited guests are nearly all representative men, and they have each, or nearly all, an opportunity of addressing a few words to the students; an opportunity is also afforded for the expression of different views upon matters affecting the interest of the profession. The arrangements for the dinner, the issuing of invitations, receiving the guests, and arranging their seats at the table are all under the management of the students, and reflect no small credit upon the manner in which the several duties are performed, and their capabilities to entertain their friends in a royal manner. Glee-Clubs are formed in each of the schools, and the proceedings of the evening are enlivened by songs, and also by the presence of a Band of music. One commendable feature of these banquets is that they are carried out on strictly temperance principles.

The Sixth annual banquet of Trinity Medical College, was held in the Rossin House on the 8th ult., and was successful in the highest degree. A large number of distinguished guests were present besides many graduates and undergraduates of the College. Mr. F. W. Dickson, a fourth year student presided. After ample justice had been done to the good things provided, the Chairman delivered an address in which he spoke of the importance of the medical profession and the necessity for thorough training in medicine. The doctor, he said, ushered the human being into existence, stood by him through life, and not unfrequently helped him out. He eulogized Trinity Medical College as a place where the embryo *medicus* might be fully developed, and from which he might go forth into the world a full-fledged and reliable practitioner. During the last few years Trinity has become famous as a medical training school, and to-day stands second to none on the continent, the list of students ever increasing, this year, exceeding all heretofore,—from the Maritime Provinces and Prince Edward Island in the east, Jamaica in the south and from many of the Western States, as far

Oregon. Letters of regret were read from several of those unable to attend, among others, one from the Dean of McGill medical college, tendering cordial greetings and best wishes for Trinity college which was enthusiastically received. The usual loyal and patriotic toasts were proposed and heartily responded to. Other toasts followed in rapid succession. The "Army, Navy and Volunteers" was responded to by Captain Drayton; "Dominion and Provincial Legislatures," responded to by Dr. Beaty, M. P., Hon. G. W. Allan, and Mr. Mulock, M. P.; "Mayor and Corporation," responded to by the Mayor; "The Press," responded to by Drs. Cameron and Fulton, and Mr. Pirie; "Universities with which we are affiliated and sister institutions," responded to by Hon. G. W. Allan, Mr. Mulock, Principal Caven, Principal Castle, and Mr. Buchanan. "The College of Physicians and Surgeons of Ontario," responded to by Dr. Canniff. "The Learned Professions," responded to by Mr. Goldwin Smith. Then followed the toast of the evening, "Trinity Medical College, and Graduates and Undergraduates," which was received with great applause.

Dr. Geikie, Dean of the Faculty, in responding said, amongst other things, that the regular and steady growth of the school was very satisfactory to the faculty, and to its friends everywhere. He gave the following figures:—In 1874-5, the class numbered 76; in 1877-8, the class numbered 128; in 1880-1, the class numbered 136; in 1881-2, the class numbered 168; in 1882-3, (the present year) the class numbered 188. He said the faculty had greatly improved the equipments of the school, furnishing it with every modern appliance, to promote practical instruction in the various branches. He emphasized very strongly the benefits being derived from the teaching of practical medicine and surgery at the hospital, clinical instruction being given every day in medicine and surgery in connection with the outdoor and indoor patients at that institution. He spoke of the arrangements and management of the Hospital as reflecting the greatest credit upon all concerned; and that to the Board of Trustees and the resident medical officer, Dr. O'Reilly, the students and the whole public owe a very great debt of gratitude. The doctor finished his speech by contrasting the advantages enjoyed now by students studying in Toronto, which are not exceeded, if equalled, throughout the Domin-

ion, with the state of things prevailing twenty-five or thirty years back. The toast was also responded to by Dr. G. O'Reilly, Mr. Casgrain, Mr. Freeman, and Mr. Lang.

The concluding toasts were "Toronto General Hospital," responded to by Dr. G. O'Reilly, "The Ladies," responded to by Dr. Teskey, and a very pleasant evening's entertainment was brought to a close.

The Ninth annual dinner of the Toronto School of Medicine was celebrated in the Pavillion of the Horticultural Gardens on the 14th ult. A new departure was inaugurated by the admission of ladies in the galleries to witness the proceedings, and if one might judge from the numbers present and the cordial interest they seemed to take in the proceedings the innovation must be considered a success. Whether, as the morning papers stated, that interest was mingled with a tinge of jealousy, at the more favored position of the sterner sex in the arena, in having all the good things to themselves is not known, but certainly the wish given expression to by one or two of the speakers, that next year the annual gathering should take the form of a *conversazione*, must have engendered a responsive feeling in the minds of their fair hearers. The hall was profusely and artistically decorated with flags, and the band of the Queen's Own enlivened the proceedings with choice selections. There were a large number of guests and friends of the school present, yet the hall seemed sparsely filled, as its large size was somewhat out of proportion to the numbers present. The chair was occupied by Mr. H. S. Clerk. After the *Dinner* the Chairman delivered an address, in which he thanked his fellow students for placing him in the position he occupied, and also welcomed the guests who had honored them with their presence. He alluded to the change which he hoped met with their approval in beholding the beautiful countenances and bright eyes of the fair ones looking down upon them. The Ladies of Toronto were no strangers to the medical students; they frequently met at the Hospital and other places on their mutual errands of mercy. He also emphatically resented the indignities heaped upon the medical students, and counselled greater forbearance. In conclusion he expressed a hope that on some future occasion a *conversazione* would supplant the annual dinner so that the ladies could the better enjoy themselves. After

the toasts of "the Queen" and "the Governor-General and Lieutenant-Governors," the Chairman proposed "the Dominion Parliament and Parliament of Ontario," which was responded to by Mr. W. Mulock, M. P.

Mr. Stewart, vice-chairman, then proposed "Universities, Colleges, and Sister Institutions." He coupled with the toast the names of Chancellor Blake, Rev. Dr. Dewart, Prof. McVicar, Principal Caven, Dr. Fulton, and Mr. Davidson, all of whom responded in appropriate terms.

The other toasts were:—"The Sister Professions," responded to by Rev. Mr. Pearson, Principal Buchan and D. Beaty, M.P.; "Our Faculty," responded to by Drs. Aikins and Richardson; "Graduates and Graduating Class," responded to by Dr. McLaughlin, M.P.P., and others; "The Toronto General Hospital," responded to by Dr. O'Reilly; "The Freshmen" and "The Ladies," completed the list of toasts, and the company dispersed after having spent a very enjoyable evening.

AARON H. DAVID, M.D., L.R.C.S., E., D.C.I.

The subject of the following notice was one of the oldest and most esteemed medical practitioners in Montreal. Dr. David was born in 1812, a native of Montreal, and commenced his medical studies in McGill College; he finished his course in the University of Edinburgh, graduating in honors. Returning to Canada, he practiced for a few years in Three Rivers, Que., and returned to Montreal in 1844, where he has resided since, and has been an active, zealous member of the profession. In 1852 he, with others, started the old St. Lawrence School of Medicine, and the same year, assisted by the late Dr. R. L. McDonnell, founded the *Canada Medical Journal*, both of which were soon discontinued. In 1870, with the late Dr. Smallwood, and others, he established the Medical Faculty of Bishop's College, of which he was Dean and Prof. of Practice of Medicine until ill-health compelled him to resign. Dr. David was also long and favorably known as the General Secretary of the Canada Medical Association, and ever took a warm interest in its success. His geniality and amiable character made him a general

favorite. He was for many years surgeon of the 5th Fusileers, and served with them during the Fenian raid. He was also up to the time of his death, a Governor of the College of Physicians and Surgeons of Quebec; President of the Natural History College of Montreal; Corresponding Member of the Literary and Historical Society of Quebec; Extraordinary Member of the Royal Medical Society of Edinburgh; Member of the British Association for the Advancement of Science, etc. Dr. David's loss leaves a blank which will not soon be filled. He was greatly respected by young and old, both within and without the profession, and many of his warm friends will be pained to hear of his death. He was a most able and conscientious practitioner; a man of strict integrity of character, gentlemanly instincts, and a high sense of honor. He suffered for upwards of two years from cancer of the rectum, and bore his painful illness with great Christian fortitude and resignation, and even retained a degree of cheerfulness which was surprising to his friends. His family has our heartfelt sympathy, and the sympathy of all who knew the deceased.

JOHN R. DICKSON, M.D., F.R.C.S., EDIN., &c.

We regret to announce the death of Dr. Dickson, of Kingston, at the comparatively early age of sixty-three years. He had been suffering from paralysis for some time past, and although his death was soon to be anticipated, it was unexpectedly sudden in the end. He came to Canada in 1837, and settled in Peterboro, where he practised for several years, but finding the work too laborious, he removed to Kingston. In 1854, he, along with others, established a medical school in connection with the University of Queen's College, and was appointed professor of surgery in the new school. This school subsequently became incorporated as the Royal College of Physicians and Surgeons in 1866. Dr. Dickson was the possessor of a number of medical degrees and diplomas, and held several very important appointments. He received the degree of M.D. in the University of New York in 1842, and M.D. in the University of Queen's College in 1863. He was also a member of the Royal College of Surgeons, Eng., member of the Royal College of Physicians, London, and Fellow of the Royal College of Surgeons,

Edin. In 1874 he was appointed surgeon to the Provincial Penitentiary, and was medical superintendent of the Rockwood asylum for insane from 1874 to 1879. He was a prominent member of the Ontario Medical Council during the first three years of its existence, from 1866-69, and was elected president for the first year. Ill health compelled him several years ago to resign all public appointments, and also to discontinue his practice. He was a man of sterling character, indomitable will, great energy and perseverance, and has left his impress upon everything he undertook. He was greatly respected by all who knew him, and his loss will be much felt by his family and friends. One of his sons is practising medicine at Wolfe Island, Kingston.

VITAL STATISTICS.—From present indications there seems every prospect that the Dominion government is about to concede the request of the medical profession as expressed by the Canada Medical Association. The report of the special committee on Sanitation and Vital Statistics presented by the chairman, Dr. Canniff, and adopted by the association, was to the following effect:—

1. That for the present the sanitary statistics shall be confined to the cities and larger towns of the Dominion, such to be published monthly, and the deductions therefrom to be circulated in the various centres specified. 2. That for the future guidance in sanitary matters a commission should be appointed by the Dominion Government, in order, in consultation and co-operation with the various Local Governments, to arrive at some common basis of action in carrying out such sanitary measures as may be necessary for the guidance of the Dominion Government. 3. That such commission shall consist of at least two or more medical men with a legal adviser, whose duty it shall be to examine carefully into the various requirements of such action in sanitary matters.

We observe from the daily press that arrangements have been, or are being made, to hold a convention at Ottawa in relation to State Hygiene. We presume that this action is in accordance with the spirit of the preceding resolutions. As the Dominion Government has declared its desire to accede, as far as may seem practicable, to the earnestly expressed request of the profession,

actuated by a feeling not seemingly in its own interest, we presume that the movement is being carried out in harmony with the opinion of the committee to whom was intrusted this most important national work.

DEATH FROM CHLOROFORM.—Another of those sad occurrences which are occasionally to be expected when powerful remedies are used to produce insensibility to pain, took place in Quebec. The patient was a boy, ten years of age, about to have a tooth extracted. The anæsthetic was administered by Dr. Russel, jr., with every possible care. On the first indication of alarming symptoms, the Dr. immediately discontinued the inhalation and commenced artificial respiration. In this case life was maintained for about two hours after the discontinuance of the chloroform, the patient seeming to die of gradual paralysis of the nerves of respiration and circulation.

THE ONTARIO MEDICAL REGISTER.—The new edition of the *Ontario Medical Register* has just been issued from the press. It is a great improvement upon previous editions, and we congratulate Dr. Pyne upon its very creditable appearance. Besides the names of the members of the College, 1700 in number, it contains the "Ontario Medical Act," rules and regulations of the Council, the boundaries of the twelve territorial divisions, and remarks on the penal clauses of the Act for the guidance of members. There is one practitioner to every 1125 inhabitants in Ontario.

HOME FOR LITTLE BOYS.—We take pleasure in calling attention to the establishment of a home for little boys by the family of a deceased physician—the Misses Cole, of Clinton, Ont. The home will be especially suitable for widowers' sons and those whose parents are much away from home, or unable through illness to take charge of them. For terms, etc., see advertisement.

TRINITY UNIVERSITY CONVOCATION.—The annual Convocation of Trinity College was held on the 16th ult. The following gentlemen received degrees in medicine:—

M.B.—Alexander Cameron, Walter Henry Day.

M.D.C.M.—W. T. Stuart, C. Sheard, L. Teskey, Edward S. Wilson, James W. L. Hunter, Arthur D. Smith, Reginald W. Belt.

C.M.—W. H. Macdonald, R. H. Barkwell.

M.D.—W. M. Brett, Archibald C. Gaviller, Philip J. Strathy, Frederick D. Canfield.

The Professors of the Faculty of Trinity Medical College were admitted *ad eundem gradum*.

PERSONALS.—Dr. J. R. Clark, of Trinity Medical College, who has been absent in Europe for several years, has commenced practice in Cobourg. He has taken the double qualification of L.R.C.P. & S., Edin.

Dr. H. E. Heyd, of Brantford, and Dr. K. McKenzie, of Richmond, Que., have recently returned from Europe, where they have been pursuing their professional studies for some time past. Dr. R. Bentley, of Kettleby, has also returned after a long absence.

Dr. Shupe, formerly of Stevensville, has removed to Port Elgin, Ont.

A SAD CALAMITY.—No greater calamity could befall any one than that which recently occurred to Dr. E. C. Seguin, the noted neurologist, of New York. His wife, in a fit of temporary insanity, shot all her little children—three in number—and afterwards herself. Mrs. Seguin is said to have been of an amiable disposition, kind and devoted to her husband, and showed no signs of insanity except occasional attacks of melancholia. Her husband had made arrangements for her to accompany him on a pleasure trip on the following day, but on coming home in the evening found himself suddenly deprived of his entire family.

APPOINTMENTS.—Mr. John Galbraith, Prof. of Engineering in the School of Practical Science, has been appointed a member of the Ontario Board of Health.—Dr. J. M. Lefevre, of Brockville, has been appointed surgeon in one of the eastern sections of the Canada Pacific Railway.—Dr. G. R. J. Crawford, of Canterbury Station, N.B., has been appointed House Surgeon to the St. John General Hospital.—Mr. H. R. Casgrain, of Trinity Medical College, has been appointed Assistant to the resident staff of the Toronto General Hospital.

NEW YORK MEDICAL JOURNAL.—After the 1st of January, 1883, the *New York Medical Journal* will appear as a weekly instead of a monthly as formerly. We wish the *Journal* success in the new departure.

L.R.C.P., EDIN.—A. D. Nasmith, M.D., of Toronto, has successfully passed the examination for the double qualification of L.R.C.P., Edin., and L.F.P. & S., Glasgow.

We regret to learn that Sir Thos. Watson, author of Watson's Practice of Medicine, who is now in his ninety-first year, is so seriously ill that his life is despaired of.

Dr. E. B. Sparham, who was sentenced a few years ago to imprisonment for life, has been pardoned by the Minister of Justice.

The death of Dr. Henry Draper, of the Medical Department of the University of New York, at the early age of 45 years, is announced.

CORONER.—Dr. J. P. Rankin, of Tavistock, Ont., has been appointed coroner for the Counties of Oxford and Perth.

The death of George Critchett, F.R.C.S., Eng., the celebrated oculist, at the age of 60 years, is announced in our British exchanges.

Dr. J. F. W. Howitt, of Toronto, has successfully passed his primary examination before the Royal College of Surgeons, England.

Births, Marriages and Deaths.

In Toronto, on the 14th ult., G. S. Ryerson, M.D., L.R.C.P. & S., Edin., Oculist and Aurist. Toronto, to Mary Amelia, second daughter of Jas. Crowther, Esq.

On the 15th ult., Hon. Dr. Duncan Campbell, of Port Hood, N.S., member of the N.S. Government, in the 38th year of his age.

On the 7th of October, Dr. John Fraser, of Font Hill, in the 76th year of his age.

In Hamilton, Ont., on the 1st ult., Dr. Edwin Henwood, aged 67 years.

In Brantford, Ont., on the 24th ult., Dr. W. H. Bacon, in the 60th year of his age.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

REPORT ON OPHTHALMOLOGY*

BY A. M. ROSEBRUGH, M. D. TORONTO.

The ophthalmoscope was invented in 1851. Von Græfë commenced his brilliant career the same year, or the year previous. In 1854 Von Græfë and Donders established the "Archives für Ophthalmologie," and in 1860 Prof. Donders published his great work on "Accommodation and Refraction." About the same time Snellen constructed his "Test Types." In 1865 Von Græfë discovered that iridectomy will relieve intraocular pressure in glaucoma; and in 1867 he gave the world the modern operation for hard cataract. The invention of the ophthalmoscope, then, may be said to mark the commencement of a new era in ophthalmic medicine and surgery. We will not pause even to enumerate the pathological conditions that may be observed with the eye mirror. We may say in general terms, however, that, with the exception of the ciliary processes, and a narrow zone of the anterior expanse of the retina, all the structures of the inner eye, with the aid of the ophthalmoscope, are brought under the eye of the observer. Except in a few cases where the disease has no ocular expression, the ophthalmoscope enables us to find a cause for all forms of blindness formerly called amaurosis and amblyopia. The ophthalmoscope is also a valuable aid in diagnosing diseases of nervous centres, as, for instance, coarse disease at the base of the brain; and quite recently the ophthalmoscope has been recommended as a means of diagnosing diseases of the inner ear.

The treatise of Prof. Donders, of Utrecht on the optical defects of the eye, which appeared in Holland in 1860, and which was afterwards translated

and published by the New Sydenham Society, is still a standard text-book. In the choice of spectacles, Donders' great work is the foundation of our therapeutics. Donders was enabled to eliminate the variable from the fixed refraction of the eye, and discovered, *first*, that presbyopia is not a refractive error, but is simply a gradual lessening of the focal adjusting power, or accommodation of the eye, and usually commences as early as at the age of 15 years; secondly, that in the original structure of the globe, the antero-posterior diameter of the eye may be elongated or shortened, causing excessive or deficient refraction, and called respectively myopia and hyperopia; thirdly that the refraction of the different meridians of the eye may be unequal. Thus, in the vertical meridian, for instance, the refraction may be normal, while the horizontal meridian may be either myopic or hyperopic, and that this condition called astigmatism, may be simple, or it may be complicated with myopia or hyperopia. For paralyzing the accommodation, Donders dropped into the conjunctival sac a few drops of a solution of atropine, 4 grs. to the ounce. He also demonstrated that errors of refraction are factors in the causation of strabismus,—that fully 75 per cent. of cases of convergent strabismus are caused by hyperopia, that a large number of cases of divergent strabismus are due to myopia, and that the development of the strabismus may be arrested by the early correction of the optical defect by the use of suitable spectacles, and also that after a tenotomy has been performed the wearing of the spectacles is often necessary to prevent a relapse of the deformity. More recently, it has been satisfactorily demonstrated that the irritation arising from uncorrected errors of refraction may cause various eye troubles, such as phlyctenular inflammation of the cornea, or conjunctiva, blepharitis marginalis, neuro-retinal congestion, &c.

Ophthalmology has been wonderfully advanced by the adoption of Standard Test Types. The average acuteness of vision in the visual line—that is, at the *fovea centralis retinae* is taken as $\frac{1}{60}$ of a degree. Capital letters, varying in size from $\frac{1}{4}$ to 4 inches in length, printed on a large card are so constructed that the diameter of the perpendicular stroke of each series of letters shall equal exactly $\frac{1}{60}$ of a degree, when viewed from a fixed distance designated: thus, No. 15 should be seen

*Read before the Ontario Medical Association, June, 1882.

distinctly at 15 feet, No. 20 at 20 feet, No. 100 at 100 feet, and so on. When a patient can distinguish, say No. 20 at 20 feet, his vision is considered normal, and it is indicated by the fraction $\frac{20}{20}$, or unity. If, however, he can only distinguish No. 10 at 20 feet, his vision would be expressed by the fraction $\frac{10}{20}$ ($=\frac{1}{2}$)—that is, the distance at which the letters are actually seen divided by the distance at which the letters might be seen with normal vision gives the fraction of acuity of vision. In modern ophthalmology, in addition to making a careful record of the acuteness of vision in the visual line, note is also made of the field of vision. This may be clouded or completely obliterated in certain directions, and may be caused by detachment of the retina, hæmorrhagic effusions, tumours, &c. Before giving a favourable prognosis in cataract cases, the extent of the visual field is carefully examined. In certain cases colour tests are also used, as it has of late been demonstrated that colour blindness may be an acquired lesion. In tobacco amaurosis, for instance, a seaman or a railroad man may be able to attend to his ordinary duties, but fail to distinguish between a red and a green signal. Hence such persons should be examined periodically for colour blindness.

We are indebted to Von Græfe for the modern treatment of glaucoma. He had noted the fact that iridectomy reduces the normal tension of the eye. When, therefore, it was subsequently discovered, by the combined aid of the ophthalmoscope and pathological examination, that glaucoma is caused by excessive intraocular pressure, Von Græfe immediately tried the effect of iridectomy in relieving the intraocular pressure, and gave to the world a cure for an hitherto incurable disease.

During the last 15 or 20 years, a complete revolution has taken place in the treatment of cataract. By the combined use of the ophthalmoscope and oblique illumination, the different varieties of cataract can be differentiated, and the state of the development of the opacity accurately ascertained. With facilities for making an accurate diagnosis, improved operative procedures, and with the judicious adaption of the operation in each case, the results of treatment are at least as satisfactory as in any other class of surgical cases. Statistics have been collected of 11,000 cases of hard cataract treated by the old "flap" operation

previous to 1868; and of 11,000 cases treated by the modern operation,—showing that with the former there was a total loss of sight in 16.7 per cent. of the cases, and with the latter operation the total loss was 6.5 per cent.; still further that of 1,000 cases of hard cataract operated upon by Von Græfe between 1865 and 1869, the total loss was less than 3 per cent. In the modern operation, for which we are indebted to Von Græfe, the triangular Beer's Knife and the semicircular corneal flap are discarded, and a narrow knife and a straighter and more peripheral cut substituted. The cut is made more nearly in the direction of a great circle of the globe, and a sector of the iris is removed, so as to facilitate the extrusion of the lens, and prevent prolapse of the iris. It is, perhaps, almost unnecessary to state, that the old operation of "couching," or pushing the lens back into the vitreous, has been completely abandoned, as it was found that fully 50 per cent. of the cases thus treated were ultimately lost from destructive inflammation.

The treatment of strabismus and paralysis of ocular muscles in late years has been modified and improved. By the operation called "layering forward," the insertion of a weakened muscle is advanced nearer the cornea. Tenotomy of a contracted muscle is performed subconjunctivally. A conjunctival suture is used to modify the effect of an operation, and prismatic spectacles are used to relieve diplopia and muscular strain.

With the modern improved methods of preparing tissue for the microscope, there has been an advance in our knowledge of the normal and pathological histology of the eye, but we cannot stop to particularize. Quite recently the extraordinary discovery has been made that in the living retina there is secreted a photo-chemical matter, called "visual purple," which is bleached in a bright light, and re-secreted in the dark. It is said to be an albuminoid secretion, confined to the layer of rods, and is believed to be a conservative element which enables the eye, in conjunction with the iris, to adapt itself to variations in the intensity of the light.

An advance has been made in our knowledge of the etiology of glaucoma. The prominent symptom in glaucoma is excessive intraocular tension. The eye is hard and unyielding. Until recently, this condition was supposed to depend upon hyper-

secretion of the choroid. It is now known that this is not necessarily the case, and that the loss of equilibrium of intraocular pressure may be caused by any interference with exosmosis or filtration from the eye, that pressure from the peripheral part of the iris against Fontana's spaces and Schlemm's canal—at the so-called "iritic angle,"—causes glaucoma, not from any increase in the secretion from iris or choroid, it is claimed, but by mechanically interfering with exosmosis or filtration through the trabeculae of the anterior scleral ring. Iridectomy, or the removal of about $\frac{1}{2}$ of the iris, was supposed to relieve the intraocular pressure by removing a large secreting surface, but its action is now believed to depend partly upon the removal of pressure at the iritic angle, and partly upon filtration being favoured by the cicatrix, in the anterior scleral ring.

The construction of the ophthalmoscope has been greatly improved of late years. The form now in general use is Knapp's and Loring's. A disc is secured behind the mirror which can be rotated, and which carries a series of very small convex and concave lenses behind the central aperture of the mirror. By this convenient arrangement any optical defect either in the eye of the observer, or in the eye under observation, is counterbalanced. By suspending the accommodation and rotating the lenses behind the mirror, the latter being brought close to the eye under observation, the refraction can be, at least approximately determined, and by this method alone it is possible to prescribe the proper correcting spectacles; but this method of examination is rather resorted to for the purpose of confirming the result of the examination made with the test types and trial glasses,—with or without paralyzing the accommodation.

Among the operative procedures which may be said to be on trial may be mentioned optico-ciliary neurotomy as a substitute for enucleation; sclerotomy as a substitute for iridectomy in certain forms of glaucoma, and Loring's dissection of the iris for closed pupil after cataract operation.

Eserine is being substituted for atropine in connection with cataract operations, and in the after treatment of extraction, the eye is now less interfered with than formerly. If there is no œdema of, or discharge from between the eyelids, it is now advised to keep the eye closed for about seven days after the operation. For the removal of chips of

iron or steel from the interior of the eye, the permanent magnet is giving place to the more powerful electro-magnet.

Antisepsis, which has proved a boon in general surgery, has been tried in ophthalmic surgery, but not with encouraging results; and, moreover, the practical difficulties in the way of carrying out strictly antiseptic treatment in ordinary eye operations, seem to be almost insurmountable. The eye is, however, sponged with antiseptic solutions before and after operations, and caution is used to prevent the infection of wounds from blenorrhœa of the lachrymal sac, the discharges from trachoma, &c., and where atropine or eserine is used continuously for some time, it is considered advisable that these salts (which, by-the-way, should be quite neutral) should be dissolved in a two or three per cent. solution of boracic acid. Boracic acid solution are also used in cases where there is purulent discharge.

Among the new remedies recently introduced into ophthalmic practice, duboisia and homatropine dilate the pupil, while eserine and pilocarpine contract it. Duboisia can be substituted for atropine in the exceptional cases where the latter is found to irritate the conjunctiva. Atropine is the most reliable for dilating the pupil in plastic iritis. It also acts as an anodyne to the sensitive nerves of the iris and cornea. But it is contra-indicated where there is a tendency to glaucomatous complications, or in serous iritis, on account of its tendency to increase intraocular tension; in the latter case, homatropine is substituted for the atropine. In cases where it is simply desirable to dilate the pupil temporarily, as, for instance, for an ophthalmoscopic examination, homatropine, used in a weak solution, will dilate the pupil without paralyzing the accommodation, and its effect upon the pupil is more transitory than that of atropine. Used in stronger solutions, say 5 or 6 grains to the ounce, homatropine will paralyze the accommodation, and the paralysis is not nearly so persistent as it is after using atropine solutions. This is an advantage in favour of homatropine in treating anomalies of refraction. Eserine is used both for contracting the pupil and relieving intraocular tension. It is a valuable adjunct in the treatment of glaucoma, and in some cases may alone ward off an inflammatory attack. By relieving intraocular pressure, it is a valuable remedy in suppurative and ulcerative dis-

eases of the cornea. Pilocarpine is not so powerful a myotic as eserine, and is not so much used as a local application. Used hypodermically, however, in $\frac{1}{4}$ or $\frac{1}{3}$ grain doses, it acts beneficially upon scleral and episcleral disease, and is recommended for sub-retinal effusion and opacities of the vitreous.

Pagenstecher thinks massage occupies a very important place in ocular therapeutics. He uses either circular or radial friction of the eye with the finger against the closed lid, making very light and rapid motion. It is recommended in old corneal opacities, in pustular conjunctivitis, in scleritis and episcleritis. Pagenstecher prefers combining the massage with the use of oxide of mercury ointment, but claims very satisfactory results from the massage alone.

The interest now taken in ophthalmology is quite remarkable. An International Ophthalmological Association, which meets every four years, was established about twelve years ago, and many vigorous local societies are now in operation. The American Ophthalmological Society numbers over 75 active members, and quite a large volume of transactions is published annually. There are now over one dozen journals devoted either exclusively or very specially to the advancement of this department of medical science. But, as we sometimes say, "It never rains but it pours." During the past 12 months four treatises on diseases of the eye were issued by the American press alone—one written by Dr. Noyes, of New York, one by Dr. Williams, of Boston, one by Dr. Schell, of Philadelphia, and one by Dr. Mittendorf, of New York.

OVARIAN DISEASE—OVAROTOMY—RECOVERY.

BY R. JOHNSON, M.D., CHARLOTTETOWN, P.E.I.

May 10, 1881.—Miss V., aged 17, consulted me with reference to an enlargement of the abdomen, which was first observed by her in June, 1880, and had been since then steadily increasing. Her health had begun to fail in June, 1879, and menstruation was not regular from August to December of that year. Under treatment the menses had regularly reappeared from January to June, 1880, and since then have been altogether absent.

The abdomen now presents a full rounded outline, with thin walls, and distinct fluctuation gives evidence of a large collection of fluid. The measurements are, at umbilicus 36 in., from pubes to ensiform cartilage 14 in., and from anterior superior spinous process of each side to umbilicus 8 in. General nutrition of body tolerably good; complexion clear, cheeks somewhat sunken. Thoracic and abdominal viscera performing healthy functions; uterus normal as to size, position and mobility.

May 12.—In consultation with Dr. E. MacNeill, her former attendant, exploration was made with a No. 2 aspirating needle, and having obtained a free flow of straw-colored fluid the aspiration was continued until 10½ lbs. were drawn off. The fluid completely coagulated on test of boiling. After its removal from the abdomen we readily detected a large solid tumor of irregular outline, and freely moveable in every direction. Two days afterwards the patient returned to her home some 14 miles from the city, greatly relieved.

July 15.—Patient returned to town for further treatment. The enlargement of the abdomen has returned, and there is some cedema of the left leg. General appearance about the same, and actual measurements exactly as on May 10. No return of menses. She and her friends were now made fully aware of what was judged to be the nature of her complaint, and of the possible and probable result with reference respectively to the palliative and radical treatment. After a few days deliberation she determined to undergo the radical operation.

August 2.—I operated under ether, at the Charlottetown Hospital, assisted by Drs. Hobkirk, Beer, MacLeod, Blanchard, and Conroy. The primary incision of about five inches, was necessarily made to extend, during operation, to about twice that length. Free bleeding required that two arteries should be tied before opening the peritoneum, which being done, the wall of the sac came clearly to view. Parietal adhesions were found to be extensive, but not difficult of separation. Three gallons of fluid were drawn off from one cyst, with a Spencer Wells' trocar, before withdrawing which, stout whipcord was tied around the sac, in order to assist in the further handling of the tumor. A large piece of adherent omentum was found to hold it down, and, inasmuch as it

could not be peeled off, it was ligatured and amputated. The tumor, weighing about seven pounds, was then readily drawn out from the cavity. The pedicle which was of the left ovary, was about four inches in length, broad and vascular. It was ligatured in two halves, and amputated at about two inches from its base. One of the ligatures included the Fallopian tube. Tinct. Ferri. Perchlor was applied with a glass stopper to the stump, which was held to view until dry. The ligature was then cut close and dropped. Ample time was then occupied in sponging out the cavity with warm carbolized water, until it was ascertained that all oozing had ceased, and that it was thoroughly cleansed. The abdominal incision was entirely closed with deep harelip sutures, superficial silk sutures being also inserted midway between the pins. The dressing consisted of a strip of lint soaked in carbolized oil, and laid along the line of the incision, crossed by long strips of adhesive plaster, covered with an eight-fold sheet of carbolized muslin, a deep layer of cotton wadding, and a double bandage of stout unbleached cotton. Patient was removed to her bed within an hour from her being placed upon the table. Carbolized spray was used for some minutes at the commencement and conclusion of the operation, and shut off for the most part during the intermediate stages. All ligatures were of carbolized silk, and were cut short,

Mild and good reaction was established within two hours after operation, vomiting having occurred but two or three times. During the first forty-eight hours she took nothing but sips of oatmeal water and sucked ice. No solids whatever were allowed until the eighth day. Opiate enemata, (consisting of from 20 to 40 minims of Tr. opii in an ounce or two of water or beef-tea, with occasional addition of brandy) were regularly administered from four to eight hours apart during the first three days, and again on the tenth and eleventh days. This, with brandy in milk, and a few doses of quinine combined with aromatic sulphuric acid met all the indications for medication. The urine was drawn off for a fortnight, at intervals of from four to eight hours, its quantity and quality always appearing with noticeable regularity and of normal standard. The first movement of bowels occurred on the ninth day, soon after an eight-grain dose of quinine. The wound healed

by first intention, some of the sutures being removed on the fourth, and the remainder on the seventh day. Indeed my notes indicate that everything went on to uninterrupted recovery with the exception of a sudden attack of sharp pain with tenderness on pressure in the left iliac region, the pain shooting down the left leg, and accompanied by a rapid rise of pulse and temperature, which occurred on the tenth day, and continued for 24 hours. Of 45 observations taken at regular intervals during 14 days, the highest pulse noted was 110, and the highest temperature $102\frac{2}{3}^{\circ}$ F., which occurred on the tenth day. The patient was discharged, well, on the 21st day, having been able to move about with ease and comfort four or five days previously.

Oct. 23.—Reports enjoying excellent health, and having gained much flesh. Nov. 2.—Health robust, catamenia restored. Nov. 18th, 1882.—Enjoying perfect vigorous health, which has been unbroken since last report of Nov. 2, 1881.

The tumor, examined after operation, exhibited a composite character, and presented in combination the features of what are usually recognized and described distinctively as the histoid, and cysto-sarcomatous varieties. Innumerable loculi, from the size of a bean to that of a small orange, contained, variously, mucous, colloid, oily, purulent fluids—firm sebaceous matter—a tooth, of the shape of a lateral upper incisor—tufts of fine flaxen hair—and ramifying the mass was a shapeless framework of dense white cartilage.

CLOSURE OF THE JAWS FROM AN OLD CICATRIX—ESMARCH'S OPERATION.

BY A. B. ATHERTON, M.D., L.R.C.P. & S., EDIN., FREDERICTON, N.B.

E. M., female, æt. about 35. When eight years of age had measles, for which she was treated by a physician in the country. I could not learn whether or not he gave her any mercury. Subsequently a swelling appeared on the left cheek, which resulted in an ulcerated opening in the soft parts, through which the end of the thumb might enter. Gradually the jaws were drawn together till for the last 15 years, as her mother states, she "has never seen her tongue." The patient was first seen by me about the year 1872, and at that time

the teeth were beginning to be so firmly forced together that the incisors were nearly horizontal, and some of the bicuspid and molars were loosened and removed. The opening in the cheek was plugged every day with a piece of cotton wool to hide the deformity, while she fed herself with fluids through the mouth, sucking the food through an aperture left by absent back teeth.

An operation was talked of then for her relief, but no action was taken till the 1st of March, 1877. At this date it was rendered imperative by the fact that pieces of tartar or loosened molars had fallen inwards several times, and the patient had been once or twice on the verge of strangling by being forced to swallow them. Chloroform being given, with the assistance of Drs. Coburn and Ellis, of Fredericton, and Dr. Holden, of St. John, who happened to be here on a visit, the following operation was done:—The sides of the opening in the cheek were cut into, and the surrounding adherent soft parts separated from the jaws, so as to admit of coaptation of the raw edges; then, several teeth were removed which were in the way, and by means of a chain-saw a piece of the lower jaw just in front of the left masseter, about three-fourths of an inch or more on its upper surface, and one-half inch on its lower, removed. The chain of the saw was passed around the jaw by means of a small blunt hook being forced through the soft parts between the jaw and skin of the cheek, and thereby catching hold of the chain and drawing it up and out after it. In this way only a very slight punctured wound was made by the large needle of the chain-saw which was run through the skin so as to bring the end of the chain within reach of the hook above-mentioned. A great deal of difficulty and danger arose during this part of the operation, from a large mass of tartar, which completely filled up the cavity between the tongue and the lower jaw in front, and to the left side. The mass was nearly spherical and about the size of a walnut. Its surface was irregular, and its irregularity was apparently due to the creases and depressions in the neighboring soft parts, by means of which it was quite firmly attached to them; and when separated, considerable bleeding followed from these parts. The wound in the skin was now fairly well approximated by silver sutures, and carbolized oil dressing was applied, directions being left that the mouth be frequently washed out with

carbolyzed water. This treatment was pursued throughout.

The patient did very well after the operation, the edges of the opening in the cheek uniting by first intention, and the bone healing after throwing off one or two small bits of necrosed tissue. In three or four weeks she could chew fairly well, and could open the jaws nearly an inch. Very little scar was left, and to this undoubtedly as well as to the improved condition of her jaws, may be attributed the fact, that in a year or so she was married to a young man about her own age, and has contributed more than once towards the population of the Dominion. The jaws at present have come together somewhat, owing to adhesions of the false joint, so that she can open them only about half an inch, but she expresses herself well satisfied with their condition.

Correspondence.

RÔTHELN OR GERMAN MEASLES.

"Quot homines, tot sententiæ."

To the Editor of THE CANADA LANCET.

SIR,—In reply to Dr. Skirving, *re* "Rôtheln or German Measles," I beg to say that my only authority for using the term *German Measles*, is Prof. Da Costa who in his work on "Diagnosis" says that Rôtheln is "*often spoken of as German Measles*." However, as this distinct eruptive fever is likely to be re-christened as "Rubella," we will not argue about its name. Judging from the cases I have seen, I believe this fever to be entirely distinct from both measles and scarlet fever. Nevertheless, I do not intend to question the right of any medical gentleman to hold the belief, that Rôtheln is a "hybrid," if he so chooses. During the epidemic here, not a single case of either measles or scarlet fever occurred in my practice, nor for several months before, nor for several after. Besides, in numerous instances, I had previously attended the same children during well-marked measles, and subsequently during well marked attacks of scarlet fever.

Referring to Rôtheln, Wunderlich says, "The temperature is nearly always sub-febrile (99.5° to 100.4°)—sometimes febrile (101.3° to 102.2°)." The same writer speaking of scarlet fever says,

"the temperature may reach 105.6° or even a higher point. It usually remains *continuously* high during the eruption, and it is thus well distinguished from those affections with which, on account of other symptoms, it is most easily confounded, and more particularly *measles and r  theln*." The temperature falls rapidly on appearance of eruption in R  theln; and in from twelve to twenty-four hours after eruption in measles, but the fever at the outset of the latter may run as high as 105° or 106° Fahr.

In the October number of the *Canada Medical and Surgical Journal* for the year 1880, may be found the following diagnostic points, separating R  theln from measles and scarlatina. 1. The temperature rarely rises above 101° to 102° . 2. The eruption generally appears *at once* all over the body. 3. R  theln affords no protection against either measles or scarlatina and *vice versa*. 4. R  theln propagates itself and never gives rise to either measles or scarlatina. 5. The patches of eruption in R  theln are raised above the surrounding skin, especially towards the centre where the color is deeper. 6. The desquamation is in fine branny scales, and commences at the centre of the eruptive patch, gradually extending to the circumference. 7. The patches of eruption are larger and brighter in severe cases than in mild ones. 8. The tongue is more or less dirty at first, then becomes strawberry-like, and finally smooth—(Dr. W. D. Hemming, *Edin. Med. Journal*.) Hoping, that you will forgive me for trespassing on so much of your space.

I remain, yours respectfully,

R. A. ALEXANDER.

Grimsby, Ont., Dec. 5th, 1882.

Selected Articles.

TREATMENT OF DIPHTHERIA.

The following is an extract from a lecture given recently by Morell McKenzie, M.D., London, Eng., in Bellevue Hospital, New York, and reported in the *Medical Record*:—

The first great point in the treatment of this disease is to attend to constitutional measures and then to local treatment. The constitutional treatment is of no less importance than the local. It is necessary to support the patient from the beginning, and stimulants are of the utmost import-

ance. Do not wait until the patient becomes depressed, but give stimulants from the very commencement. This is an exception to all diseases, and you must begin with stimulants at the commencement, and give them in the more solid form, such as brandy diluted with water, or port wine; such as furnish nutriment as well as alcohol. When the patient is beginning to recover, the light wines, especially champagne, are useful; but, in the early stages, port wine with water is one of the most useful you can give. Stimulants must be given during the night as well as during the day in a very large number of cases. I have seen many cases where patients have died through want of having stimulants administered during the night. In young children it is very frequently necessary to awaken the patient and give stimulants. As a general rule, it is bad to wake a patient out of a refreshing sleep to give medicines; but here is an exception, and I would say that if the child sleeps more than four hours, it must be awakened and stimulants and nourishment administered.

We now pass on from the use of stimulants to the use of medicines. Here, again, we meet with a very great variety, but the most useful, perhaps, of all, is the perchloride of iron. In this matter I am entirely in accord with Professor Jacobi, who has found the remedy more useful than any other. Professor Jacobi has laid it down that this medicine should be given in full doses. It is also important to give a per-salt of iron, which can be assimilated with comparative ease, and probably the perchloride is the best you can use, and of it at least a drachm a day, diluted with water, should be administered; fifteen drops, well diluted with water, four times a day. The only time when I have not given the perchloride of iron has been when I have been trying the local effects of some agent that has been employed. Quinine is a very useful medicine. When the temperature is high it has a very great effect in bringing it down nearly or quite to the normal. These are, perhaps, the most important of the constitutional remedies.

All sorts of specifics have been recommended, but I have not had much success with them. Chlorate of potash has been very much praised, both as a constitutional and a local medicine. You may give it, because it cannot, in proper doses, do much harm, and it may do some good. There is one remedy which has been recommended by a gentleman whom I see before me, Dr. Beverley Robinson, and that is copaiba, which has an important effect upon mucous membranes, as possibly some of you may have had occasion to observe. But its effects are not confined to the mucous membrane of the urethra. It also produces a marked effect upon the mucous membrane of the pharynx and larynx, and that of the whole bronchial tract. I have tried Dr. Robinson's re-

commendation, giving the medicine in the form of pearls, which the French make, and which children take very easily, and I have administered them with great success. But I must mention that I have used it in the catarrhal form of diphtheria—the milder cases—where the exudation is not very adhesive. Even in the more serious cases of catarrhal diphtheria, you will find great benefit following the administration of copaiba.

We will next pass to local remedies, and here, again, we have a very wide field. A great many doctors may go through a lifetime and see only a few cases of diphtheria. Some meet with severe epidemics, and others with epidemics mild in character. The consequence is that an immense number of remedies are not only recommended, but the doctors say that they have not lost a case since they began to use such and such remedies. You must look upon such statements with great suspicion, and it is safe to consider that the doctors who have treated so large a number of cases with such uniform success, have, at least, treated a mild type of diphtheria. The local remedies in most common vogue are lime-water and lactic acid. Both of these remedies have one great advantage; they do not do any harm. And here I may say, gentlemen, that it is a great thing, when you are trying a remedy, to use one that does no harm. In early days severe caustics were used, such as hydrochloric acid, nitrate of silver, and, if the patient recovered, it was always thought that event was due to the acid or the silver. But all that has been changed. We now know that if strong caustics are used the effect is almost always to cause extension of the disease. The remedy inflames and irritates, and a false membrane is formed in close contiguity to that which previously existed. When we were suddenly told by German physicians that lactic acid was used with great benefit, and also lime-water, the news was so gratifying that we all used these remedies, which were not injurious or painful to the patient. Both have been found useful. I ought to say here that certain solutions have been said to be useful because of the effect they produce upon the false membrane, causing it to gradually dissolve and disappear in a short time. But, unfortunately, when we have to deal with the living subject we have a totally different condition of things from that which is present in making experiments, and I have found that when using substances locally sufficient to have any effect upon the false membrane, they had an irritating effect on the mucous membrane which I was treating. Hence I returned to the use of such remedies as do not irritate, and have given up those which had a reputation for dissolving false membrane. With regard to lactic acid and lime-water, they do not have much effect upon the false membrane in the test-tube, but they certainly do seem to have considerable effect when

applied to false membrane growing upon mucous membrane. It is very difficult to make accurate observations with regard to the progress of the disease from hour to hour in children; but I have had opportunity to try both remedies upon false membrane inside the lip and upon the tongue, where I could watch the effect. I recollect three cases in which I tried the experiment with lime-water where false membrane was growing upon the inside of the lip. I treated one side with lime-water and left the other to nature, and the side treated rapidly improved, while the other remained stationary. So that I believe lime-water is useful as a local application, and in this respect I differ with my friend, Dr. Jacobi, who believes that both lactic acid and lime-water have been overestimated. I strongly recommend that you should use them in every case.

We now pass on to another class of remedies, which I wish to bring to your notice, namely, those which shut out the air. This class of remedies I have introduced, and they have been employed in England to some extent. I refer to what may be called varnishing the mucous membrane with benzoin, or tolu dissolved in ether, or chloroform, or alcohol, and also used in various mixtures. I found as the result of considerable experiment that tolu dissolved in ether, in the proportion of 1 to 5, made an excellent varnish, and that when applied to the mucous membrane it did not cause pain or inconvenience, was sufficiently strong to hold, and did not require to be repeated. Many of these local remedies have been recommended on the ground that they destroy germs. Just here it occurs to me that I have omitted to speak of carbolic acid and salicylic acid, etc. Carbolic acid is an excellent remedy, and it has the effect, as has been demonstrated, of destroying germs, and if used sufficiently diluted it will do no harm. All this class of remedies have been recommended upon the scientific ground that they destroy germs. The principle upon which I have introduced the remedies which varnish the mucous membrane is, that whatever the poisonous element may be, whether a vegetable growth or some other germ, or something else, this living matter that causes false membrane to be formed, requires the presence of air. Directly you exclude the air you prevent the growth of germs which require air for their existence. As soon as possible, therefore, I apply this varnish over the false membrane; not only over the false membrane, but all around it. It is of itself to a certain extent a germ destroyer, but everything depends upon the coating of varnish being air-tight. Some of my friends, at first, found considerable difficulty in applying it, and I also had the same experience. At first I wiped the surface, to which it was to be applied, with blotting-paper. I carefully applied this absorbing material to different parts of the throat, and then im-

mediately afterward applied this varnish. This plan answers perfectly well when you can do it; but every now and then you will find a patient who will retch a little just after the blotting-paper has touched the surface, and the mucous membrane becomes wet before you can apply the varnish. I then adopted the plan of putting a piece of lint around my finger and drying the throat with this, and then quickly applying the varnish with a brush. This does not hurt the child, and I speak of children, because nine-tenths of our cases occur among children, and it answers perfectly well; but if you should have difficulty with this, I should advise you to apply the varnish all the same. I have had several patients treated entirely by the use of the varnish, without constitutional remedies, and with good results.

I will now say a few words with reference to the use of steam and the use of ice. Both these remedies are useful, but they should be applied in different classes of cases. In the early stages it is very useful to employ ice. It affords the greatest comfort to the patient. Let them have ice, and take as much as possible. Many young children are pleased to have pieces of ice put into their mouths. There is no doubt that it restricts the associated inflammation so often present. In the early stages it is most desirable to use ice, and you can use any amount of it without doing any harm. It is only in exceptional cases, where the patient is very much depressed, and in the very advanced degrees of poisoning, where there is a gangrene, that ice does harm. In many cases it diminishes the violence of the attack.

With reference to steam, it was first recommended, I think, by Mr. Prossor James, of London. After, it was pointed out by Oertel that steam must cure almost every case, and that it was the only remedy of any value at all, because the effect is to separate the false membrane from the mucous membrane. The fact is, that when a certain point in the disease is reached, when the false membrane is beginning to separate, steam is useful. At that time its effect is admirable. In the early stages I do not think it does any good. I think it lowers the vitality of the tissues, and that its effect is most prejudicial; but when the false membrane shows evidences of separating from the mucous membrane its effect is most beneficial. So you need have no fear of clashing heat and cold, for you use ice at first and steam afterward, when the disease has reached a certain stage. One great advantage of steam is that you can use some antiseptic with it, such as carbolic acid, salicylic acid, or any other substance you may choose. I should advise you to use some mild antiseptic at this stage of the disease, because a certain amount of gangrene is usually present.

The question often arises whether or not you will perform tracheotomy. I may say here that

my friend J. Solis Cohen, of Philadelphia, who is with us to-day, has published one of the most complete essays on tracheotomy ever published in the English language. I think the conclusion which may be drawn from his paper is that the operation should be performed at a comparatively early stage. That is the conviction which I have. My advice is that when once there is considerable false membrane in the larynx, when inspiration is so difficult that you see falling in of the sternum each time the patient breathes, and each supra-clavicular space deepened with every inspiration, the time has arrived for tracheotomy. But you will examine the whole of the patient's thorax, and most carefully the posterior part of the chest, to see if air enters both lungs. If you find one lung seriously obstructed, I myself should advise against tracheotomy. If you find that air does not enter the lung beyond the bifurcation of the bronchus, tracheotomy will be useless. Still there are cases in which we have everything to hope if a cure can be effected. But at the same time we should consider the interests of surgery, and when I say the interests of surgery, I mean the interests of the entire public, as well as those of the surgeon. If we perform the operation in a case almost entirely hopeless, we have to consider the effect produced upon the feelings of friends when a similar operation is to be performed in a similar case. The point which I wish to insist upon is, that if you perform tracheotomy, you should do it directly it becomes necessary. You must not wait until the case becomes hopeless. If you do this, you will find that a large number of cases which appear hopeless will terminate in recovery. On the other hand, if you perform tracheotomy too early, you will perform it in a large number of cases which will recover without it. I think the very favorable statistics with regard to the operation, especially those furnished us from Parisian hospitals, are partly the result of the operation being performed where it should not have been performed; that is, in cases of diphtheria. In this manner you can get the most favorable statistics, but it is not a fair procedure to perform tracheotomy before there are distinct signs of laryngeal dyspnoea.

ABORTION.

Clinic by PROF. W. H. TAYLOR, M. D.
(*Cincinnati Hospital*.)

Carrie B—, age 33 years, American, married, resident of Cincinnati 9 years, admitted October 22. The patient has suffered from malaria and rheumatism. She denies specific trouble. She began to menstruate when fifteen years of age and has always been regular but has suffered occasionally from pain after the flow. She has had one living child and a miscarriage in December last.

She missed her menstrual flow seven weeks ago, and one week ago she began to bleed. She has had pain in the back and some bearing down pains. She has been bleeding for a week at present date but does not flow much. There are no clots in the escaping blood. She has been drinking and is rather shaky from its effects, but is steadier this morning than she was last night. She slept well during the past night. Her bowels are constipated and appetite poor.

About one week after the disappearance of her menses she began to be sick at the stomach every morning and this condition continued for a month or more. She took tansy tea to bring on the flow. Upon vaginal examination the os is found patulous, admitting the tip of the finger and the uterus enlarged. It is perceptible above the brim of the pelvis.

Gentlemen :—There are two facts in the history of the case you have just heard read that should at once awaken suspicion as to the true condition of this patient. A married woman, previously regular ceases to menstruate. Following almost immediately upon this cessation of menstruation we have a history of nausea and vomiting, a condition occurring so frequently among pregnant women in the early hours of the day, that it is generally known, both by the profession and laity, by the name of "morning sickness". These two symptoms, taken in connection are strongly suggestive of pregnancy, but they are not diagnostic.

I think the value of this latter symptom has been exaggerated by writers on obstetrics, for it is no uncommon occurrence for women in this hospital, far advanced in pregnancy, to tell us that they have never been at all nauseated during the whole course of gestation. When present this symptom is strongly suggestive of pregnancy, but it is so frequently absent in normal gestation that you can by no means infer that women who do not present this symptom are not pregnant. But where in addition to the symptoms mentioned physical examination shows us that the uterus is enlarged, we are almost certain that pregnancy exists. We can not be absolutely certain for the fetal heart sound is the only absolutely reliable sign of pregnancy and that is not demonstrable until gestation is further advanced than in the case now before us. The question is rendered still more uncertain by the fact that the tumor felt above the pubes may possibly be something else than the enlarged uterus, we may be mistaken in the signs obtained by physical examination. The only way to determine this point positively would be to insert the uterine sound. If we found the cavity of the uterus elongated there could be no further question as to the enlargement of that organ. But it is a cardinal rule in obstetric practice never to use the sound when even a suspicion of preg-

nancy exists. Hence we can only make a relative not a positive diagnosis in this case, but the collection of symptoms is such that we may be morally certain that pregnancy does not exist or has existed.

The patient's history as obtained by the house physician, also tells us that she took tansy tea to bring on her menses. This is a household remedy of little or no potency, but it is not so with the oil of tansy. The latter is a very dangerous drug. A number of cases have been reported recently, where small quantities taken to cause menstrual flow have been attended with fatal results. There is no drug in common use that is at all reliable as an abortifacient. The experience of this hospital proves this conclusively for a majority of the patients admitted to the obstetric wards have made at least one, more often several attempts to interrupt gestation by means of drugs. The fact of their applying for admission, here shows that their confidence in these popular measures for destroying the foetus has been misplaced.

During the past week, the woman now before us, has suffered from uterine hemorrhage, but as she did not enter the hospital till night before last, we are unable to tell what was expelled from the uterus, but no clots have been passed so far as we are able to ascertain. A prominent French obstetrician has recently published an article, and you will find it now going the rounds of the medical press, in which he says it is possible to distinguish an abortion in the early months of pregnancy from a return of suppressed or delayed menses by presence of clots in the flow caused by an early abortion and their absence in the flow of returning menstruation.

The present case, in addition to many others, which I have seen, convinces me that the distinction is not reliable. In early abortions the foetus is often too small to attract attention and the blood escaping freely may not coagulate, while the menstrual flow is sometimes mingled with coagula.

In the case now before you, while the flow of blood has never contained clots, we have here the enlarged uterus, and other symptoms that make us morally certain that we have not a return of suppressed menses, but an interruption of pregnancy, an abortion. Another statement recorded in the history of the case as given by the woman herself is worthy of special attention. She says that she was regular until seven weeks ago, but we find on palpation the uterus is perceptible above the pelvic brim. This in itself is conclusive evidence that she is mistaken in the supposed duration of her pregnancy. The uterus sinks in the pelvis in the first months of pregnancy, and only rises above the pubes after the third month. So we have here an abortion to treat, that is occurring in the first three months of gestation, or in the earlier part of the fourth month. Late abortions require an entirely different plan of treatment, but time forbids our

entering at length into the discussion of it this morning.

In the treatment of all abortions, the first question to be determined is whether or not it is possible to prevent the threatened destruction of foetus and secure the birth of a child at full time. If you believe this possible, rest in bed and large doses of opium are the remedies you should employ. But if the abortion is inevitable the indications for treatment are to empty the uterus as soon as possible.

"There is no safety except in an empty uterus". It is the custom of most physicians to give ergot in these cases for the purpose of arresting hemorrhage, and promoting the expulsion of the foetal membranes and decidua. This custom I do not approve. Ergot can only arrest hemorrhage by causing contraction of the muscular fibres of the uterus. Now in this early period of utero-gestation, the uterine muscular fibres are so little developed that their action can have little or no effect in controlling the hemorrhage. If ergot should cause contraction of the uterus it would close the os and thus defeat the object for which it is given, so I never use it in treating abortion. The proper treatment is to insert the finger and gently scrape away the membranes and decidua.

If the membranes are unruptured, a very rare occurrence, great care should be taken not to rupture them. The so-called placental forceps should not be used in these cases. While they may be inserted further than the finger, you have no means of knowing whether you have seized a portion of the membranes or some of the proper structures of the uterus and great harm may be done by their employment. Where instrumental interference is demanded use only the dull wire curette. With it you can remove all membranes and decidua and can do no serious harm. The sharp curette, recommended by some prominent writers, is like a knife that will cut away some healthy mucous membranes as readily as foetal membranes and should not be employed in the uterus already made very susceptible to injury by the intense congestion which pregnancy induces.

But often when a physician is called to see a case, the os is not sufficiently dilated to admit the examining finger. Then your treatment should vary in accordance with the occurrence or non-occurrence of hemorrhage. In the present case where the woman is not flooding much, we are giving her simply the mucilage of Acacia as a placebo and waiting for nature to effect a cure. Should there be much bleeding more active treatment must be instituted.

Most text books recommend the vaginal tampon for these cases. But in early abortions it is better to plug the os uteri. Bear in mind the distinction, that it is only in case occurring in the early months of pregnancy, that this method is applicable. Late

in pregnancy, there is only one circumstance that should justify the insertion of a plug into the os uteri. But in the early months it can be resorted to without danger. The cavity of the uterus is so small that it can contain at most only three or four ounces of blood and its walls are so firm that it can not be distended. Cotton, a roller bandage, twisted into the shape of a cone or sponge tent may be used as a plug. This plug by absorbing the blood, expands, and thus dilates the os, a condition we very much desire to obtain. The plug must not be allowed to remain in situ more than twenty-four hours, and it would be better to remove it in twelve. In this time it becomes very offensive from decomposition of the retained secretions, and if allowed to remain longer, would favor the development of septicæmia, the condition most to be feared in abortions. For this reason also, it is important to remove all of the decidua as soon as the os is sufficiently dilated by the plug. There is no placenta at three months, although writers in the journals often speak of the placenta in the early weeks of pregnancy. The prognosis in this case is favorable. But professional experience does not bear out the popular impression that there is little or no danger to the woman in an abortion. Probably one in ten die from its effects.—*Cincinnati Lancet and Clinic*.

LISTERISM, ITS USES AND LIMITATIONS.

BY W. M. STOKES, F.R.C.S.I.

The following is from the address in surgery read before the British Medical Association, August, 1882:—Considering that the treatment of wounds is, in Professor Humphrey's words, not merely "the first stone, but also the corner-stone of surgery," antiseptic practice should rank, in my opinion, as the greatest of the surgical advances that the past half century has witnessed. It deserves a special attention, not merely on account of the results of its adoption, but also because surgical opinion is still so divided about it—an unsettlement to which an impulse has been given by Mr. Savory's remarkable address at Cork, and by the observations on the value of carbolic spray made by Mr. Lister himself at the International Medical Congress last year. As regards Mr. Savory's denunciation of Listerism, I would say that, after reading it, and also the able reply to it by my colleague, Dr. Thompson, one can not but come to the conclusion that, when the address is stripped of all its brilliant eloquence and rhetorical decoration, two facts are, to our surprise, brought clearly to light. One is the admission of the germ-theory of putrefaction; and the other, that the method of dressing employed by Mr. Savory is es-

essentially antiseptic, consisting as it does of many of the features that characterize Listerian dressings—for example, carbolized catgut ligatures, carbolized oils, drainage, and washing the wound with a weak permanganate of potash lotion, or “some other potent antiseptic.” Now, as the author of the reply to which I have referred, properly asks, “Is this method fittingly characterized by its simplicity and the entire absence of all novelty?”

In reference to Mr. Lister's statement on the value of carbolic spray, about which there has been so much unfortunate misconstruction and misunderstanding, I would certainly say he did not surrender his position in any way. He did not, as was said to me in terms more picturesque than accurate, by an eminent surgical friend on that occasion, “Inter antiseptic surgery and sing a dirge over it.” On the contrary, he stated that he looked forward to obtaining a more perfect and convenient mode of asepticism than that afforded by carbolic spray.

Considering the subject from a purely practical point of view, it appears of very little consequence whether we accept the views recently discussed by Dr. Burdon Sanderson, or those of Ogston and Hueter, the former maintaining that the inflammatory exudates of a wound do not depend primarily on the contact with them of atmospheric organisms, but that their secondarily infective character does; in other words, that atmospheric organisms *per se* are not necessarily a source of danger, nor do they predispose to the formation of inflammatory exudates, but they do exercise a baneful influence on the latter by rendering them infective. To quote his words, “they are not so much mischief-makers as mischief-spreaders.” Two distinct functions are attributed by Burdon Sanderson to these organisms; one “of developing what may be called the phlogogenic infection, and that of conveying it to all parts of the body.” Ogston and Hueter, on the other hand, maintain, and furnish strong arguments for their views, that septic organisms are primarily the sources of all the inflammatory troubles to which wounds are liable, and that under aseptic conditions these dangers can be avoided.

The essentially weak point in the persistent and obstinate opposition to Listerism is the almost universal admission of the truth of the germ-theory of putrefaction. If the fantastic theory of heterogenesis had not long since been swept into the deserved limbo of other exploded doctrines, there would be some scientific standpoint for those opposed to Lister's theory and practice. But not having this, and admitting the truth of the germ-theory of putrefaction, they surrender their position. An attempt has been made by Mr. Lawson Tait to draw a distinction between the effects of germs on dead and living tissues, the only serious consequences being, it is alleged, those which result from their introduction into the system through

the medium of dead tissue. Such is the contention. In a word, it comes simply to this—that if the dead tissue factor were non-existent, the organisms would remain harmless; if, on the other hand, it be present, they become hurtful. But those who hold this view ignore the elementary fact that there never was a wound, and especially one in which vessels are tied or twisted, in which dead and living tissues were not at once brought into contact. Assuming, however, that this was not the case, has it not been shown on clear evidence by Dr. Burdon Sanderson that septic agencies generated in the organism may induce idiopathic inflammation without the medium of dead tissue? Also that, in acute peritonitis, septic organism can, through the medium of the lymphatic vessels, be conveyed into the blood streams, and, to use his words, “carry with them a phlogogenic virus, by virtue of which, wherever they lodge, they become the starting points of infective abscesses.” Again, that singular phenomena are observed in connection with ulcerative endocarditis, confirming the observations of Weigert that, in variola they find their way “in myriads” into the circulation, and eventually find a resting-place in the capillaries of the internal organs, where they become nuclei of infective abscesses.

Those who advocate and practice what they are pleased to term a “modified” antiseptic system, attempt, in fact, in a roundabout, clumsy, inefficient way, to do precisely what those who practice Listerism achieve by means which are the outcome of accurate scientific research.

It has been stated that ovariectomy should be considered the touchstone of the efficacy of the antiseptic treatment of wounds. I do not think so (although my successes in ovariectomy date from the time I adopted the system), and for the reasons given by Prof. Lister. First, the disposition of a large serous membrane to absorb rapidly the plasma from the cut surface, the absence of tension, the high vital power of the peritoneum in uniting after being wounded; and, lastly, that bloody serum is an unfavorable medium for the growth of micro-organisms, a fact directly at variance with the dictum of Keith, that it is the “enemy of the ovariectomist.” One of the best tests, if not the best, for the value of antiseptic practice, is resection of the knee joint, as there are so many circumstances that militate against immediate union being maintained after it. In the first place, the cases requiring so formidable an operation are, as a rule, in a condition of great physical exhaustion consequent on long confinement, and probably protracted suffering of mind and body. The wound is of necessity a large one; the operation occupies a considerable time; two large freshly-cut bone surfaces are made, between which union is to take place; and, lastly, there is the great difficulty of keeping, no matter what ap-

pliance be adopted, the limb absolutely at rest during the process of union. Before the adoption of Listerism the surgeon anticipated that four, six, or eight months or longer, would elapse before union took place, and it was always a subject discussed at consultations on these cases, previously to operation, whether the patient would have strength to endure so protracted a suppuration. As an illustration of how changed matters are now, in a series of fourteen of my cases of excision of the knee-joint, the wounds in nine of them united without a trace of pus production; and in the last of them only two dressings were required subsequent to the one applied at the time of the operation, and in seven weeks after, the patient was up and going about. Another antiseptic triumph was the case of a boy with extensive necrosis of fibula, sinuses, and suppuration existing at the time of the operation. I excised subperiosteally the diaphysis of the fibula, and the case pursued a perfectly aseptic course, the evidence of new bone-formation being also incontrovertible.

From the fact of there being no pus-production subsequent to the operation, notwithstanding the pre-existence of suppurating sinuses, a special interest attaches itself to this case. I can only account for this exceptional circumstance as a result of the careful washing of the sinuses by carbolic acid and zinc chloride solutions.

As regards the hygienic effects of the practice, I may mention some facts of interest noticed by me and my colleagues in the hospital to which I am attached. The building is a very old one, and was not constructed originally for an hospital. None of the more modern arrangements, now considered so essential, as regards heating, light, ventilation, etc., exist. It is situated in a poor, very densely-populated part of the city, with tenement-houses, dairy-yards, cattle-sheds, and stables in the neighbourhood; and some of the houses in its immediate vicinity have been designated by the medical officers of health as "fever nests." When I was a student there, erysipelas and pyemia were not unfrequently observed after operations even of no great magnitude; hospital gangrene, too, I have seen several instances of—in fact, these three diseases constituted a grim trio of which the surgeons had not unnaturally a dread. Let it not be thought that the occurrence of these was in any way to be attributed to want of care and attention to cleanliness. No cases could in this respect be more conscientiously or carefully managed. What now exists? Hospital gangrene is an extinct disease; nor have we observed, during a period extending over six years, a single case of erysipelas, septicemia, or pyemia following an operation in which the practice of Lister was accurately carried out; *accurately*, for everything depends on that. The practice has been well compared to a coat of mail, which secures the wearer so long as it is perfect,

but any missing link in which may admit the *lethalis arundo*.

Similar testimony to what I and my colleagues can state, has been given by many foreign surgeons of eminence, among whom I may mention Von Nussbaum, Bardeleben, Thiersch, Von Langenbeck, Volkmann, Esmarch, Saxtorpf, Championniere, and many others.

Although I do not regard surgical statistics with the reverential awe that some do, who look upon them in fact, as a sort of tribunal beyond which there can be no appeal, I observe that in a record of upward of six hundred operations performed by myself and my colleagues at the Richmond Surgical Hospital, during the past three years—an institution which I have already spoken of as being hygienically in so unsatisfactory a condition—the mortality was 36 per cent.; and there was not a single case in which Listerism was accurately employed that was followed by any infective disease.—*Med. Press and Circular*.

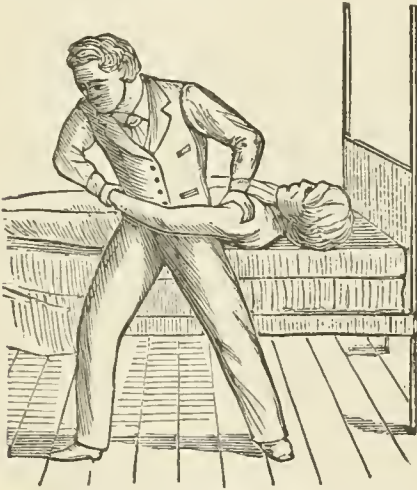
A NEW METHOD OF REDUCING DISLOCATIONS OF THE HUMERUS AND FEMUR.

BY JAMES E. KELLY, F.R.C.S.I.

I shall confine my remarks to luxations of the humerus, and mention the circumstances under which I was fortunate enough to discover my method of reduction. Late one night a sailor, æt. 40, was admitted with subcoracoid dislocation. Was of remarkably muscular development, and a highly nervous temperament. After trying unsuccessfully some of the ordinary modes of reduction, I thought of controlling his resistance by chloroform, but I discovered such extensive valvular disease that I hesitated to produce anæsthesia. As patient suffered great pain, and was clamorous for speedy relief, I repeated my efforts, and exhausted every means of reduction with which I was conversant; until in a mental condition, intermediate between desperation and a vague sense of the utility of the measure, I turned my back toward the patient, who was on a mattress, and, lying across him, I drew my arm round his pelvis, and giving my body a sudden turn, or version, I was delighted by the agreeable sound and sensation which indicate reduction of a dislocation. The striking success of this expedient produced in my mind a train of thought which resulted in the elaboration of the method which I recommend, with a confidence based upon the extensive experience of over twenty successful cases, with but one failure.

For my operation, the selection of a couch or bed is of importance. It should be firmly fixed, and hard, and, when a choice is practicable, I pre-

fer it, for the subglenoid dislocation, to be about three inches lower than the great trochanter of the operator, whilst one lower still by a few inches, for the anterior dislocations, and a little higher for the posterior, allows the force to be applied advantageously in the direction of the glenoid cavity. Patient should be placed as close as possible to the edge of the couch, on his back, with his head low. In order to make the description of the procedure intelligible, I shall divide the operation into two stages. In the first, or preparatory stage, the operator places the injured arm at right angles to the body, and standing against it with his side to the patient and his hip pressed firmly, but not roughly, into the axilla, he folds the arm and hand of the patient closely round his pelvis, and fixes the hand firmly by pressing it against the crest of his ilium. The second stage during which the reduction is effected, is very simple, consisting merely of a rotation, or version of the surgeon's body into the position represented in the figure, with a force and rapidity which necessarily vary with the peculiarity of the dislocation—some yielding most rapidly to a sudden and powerful effort, and others to gentle and gradually increasing traction.



In reviewing this manœuvre I shall briefly contrast the substitutes which it affords with the recognized methods of making extension, counter-extension and coaptation. In the application of extension, instead of the grasp of the operator, which is often insufficient, the clove-hitch or other knot, the special bracelets, combined with flexion of the fore arm, bandages, chamois or adhesive plaster, I propose the simple folding of the arm, fore-arm and hand round the pelvis, which, forming a series of angles, distributes the resistance, so as to enable the operator, with one hand, to afford sufficient fixity for the application of the powerful extending force. For the limited strength of the

operator, the uncertain and mutually obstructive force derived from numerous assistants, or the dangerous and sometimes disastrous mechanical extension by pulleys or adjusters, I would substitute a perfectly controllable and easily sustained power of some hundreds of pounds, derived from nearly all the muscles of the trunk and of the upper and the lower extremities. Again, for counter-extension, which must have been a matter of great difficulty, when such means were necessary, as the split-sheet, the fixation-table, the albi, or the special belts, the numerous assistants, the suspension of a patient over a door, through a ladder, or from a ceiling, I suggest the weight of a patient's body and the resistance afforded by its traction or friction over the rough surface of the couch. For coaptation, in lieu of the various fulcra, such as the heel, the knee, or the bed post, as well as the special balls, the jack-towels, etc., I supply one which is safe and sufficient—safe, inasmuch as the well-padded gluteal region is unlikely to produce such injuries as laceration of the axillary vessels or fracture of the ribs; and efficient because, in the torsion of the body, the hip materially assists by forcing the head of the humerus towards the glenoid cavity, and by its volume it makes the extension tend to the desirable angle of 45° , which places the deltoid and supra-spinous muscles in the most favorable condition. For any additional "manipulation," the surgeon has the hand next the patient's axilla disengaged for such manœuvres as lifting the head of the humerus into its cavity, making traction upon it forwards or pressure backwards, according to the nature of the dislocation. The fixation of the scapula, a point of considerable importance, is secured by its position between the couch and the body of the patient, while its inferior angle is supported by the gluteal region of the operator.

One of the great advantages of this operation is the ease with which a surgeon can reduce almost any dislocation without assistance or the appearance of violent exertion; but should a case of peculiar difficulty present itself, additional extension may be applied by one or more assistants making mediate or immediate traction on the patient's arm; and the counter-extension is as readily increased by pressure on his uninjured shoulder or his pelvis. The importance of being able to dispense with anæsthesia in operations is indisputable, especially when the surgeon is summoned suddenly, and without assistance, as so frequently occurs in dislocations. My colleagues have informed me of seven dislocations occurring, and reduced by my method.

For posterior dislocations of the femur.—The patient is laid prostrate upon the floor. Three strong screw-hooks are inserted into the flooring close to the perineum and each ilium of the patient, and to these hooks he is secured by strong bandages or

rope. The injured thigh is flexed at right angles to the patient's body: the foot and lower extremity of the tibia are placed against the perineum of the surgeon, who, bending forward, with the knee slightly flexed, passes his forearms behind the patient's knee and grasps his own elbows. Reduction is now accomplished by drawing the femur upwards; but circumduction may also be practised; the surgeon, stepping backward, then extends the limb, and lays it by the side of its fellow. In sciatic dislocations, in order to liberate the head of the bone from the foramen, a bandage may be passed around the thigh, close to the trochanter, by which an assistant may make traction.

For anterior dislocations.—The patient is placed upon a table of such elevation as to have his pelvis nearly as high as the trochanter of the surgeon. A bandage around the pelvis, and secured to the side of the table farthest from the dislocation, affords counter-extension. The surgeon, with his face directed towards the dislocated joint, and standing on its inner side, with his trochanter pressed against the femur, now bends the leg behind his back, and grasps the ankle with the corresponding hand. Reduction is effected by rotating or turning his body partially away from the patient, thus making traction on the femur in the most favorable direction, and at the same time pressing its head towards the acetabulum with the disengaged hand.—*Dublin Four. Med. Sci.*, Sept.

ECZEMA OF THE ANAL AND GENITAL REGIONS.

A very common accompaniment of eczema of these regions is a greater or less congestion of the portal and hæmorrhoidal circulation, manifested by a purplish congestion of the mucous membrane of the anus, or very commonly by a greater or less degree of internal or external piles. These latter may not be sufficient to be recognized by the patient, and yet be an element indicative of the existing state which must be regarded.

When this state exists, the well-known mixture of precipitated sulphur and cream of tartar should be given in sufficient quantity to secure one or two loose movements from the bowels daily. It should not be given with syrup, as this often ferments in the stomach, or acts injuriously in some other manner. The mixture should be equal parts of sulphur and bitartrate of potash, and the dose is one or two teaspoonfuls rubbed up with water into a paste, to be taken at night on retiring.

When there is no marked hæmorrhoidal congestion, use a pill of two grains and a-half each of blue mass and compound extract of colocynth with a quarter of a grain of powdered ipecac in each pill—two to be taken at night and two on the second night after, followed each morning by a Seidlitz

powder or Kissingen water. These pills should not be used at less intervals than a week or two.

If there is simply a sluggish action of the bowels, a pill may be used composed of one-half grain of extract alc. Soc., with one grain of dried sulphate of iron and a little aromatic powder and confection of roses, one pill after eating. Much may be attained in the way of overcoming the constipated habit if these pills are used as follows: At first, one pill is given directly after each meal; in a few days the noon pill is omitted, and a few days after the morning pill also, and later the evening pill is required less frequently and finally omitted. They must be used until a daily action from the bowels is acquired. As a rule, it is unwise to give cathartic mineral waters to these patients, because these waters constantly stimulate the intestinal tract by too energetic action.

Next to imperfect bowel excretion, deficient kidney excretion is an element to be regarded. The urine of these patients is seldom that of health. Frequent micturition is not at all uncommon. Most of these cases require an alkali, and the acetate of potash seems to be indicated with a bitter, as—

R. Potass. acet..... ʒj.
Tinct. nucis vom ʒij.
Infus. quassia ʒvi.

M.—S: Teaspoonful in water after eating.

This alkaline course may be continued during the entire treatment, and frequently for some time after the complete disappearance of the itching and eruption.

Not infrequently cases of eczema of the anus and genitals will be associated with oxaluria, and will be quickest relieved by strong nitric acid internally in doses of gr. ij after eating, largely diluted. [The well-known Mettauer's acid—equal parts of nitric and muriatic acid and water; dose, gr. iij-vij, in water, is often much more efficacious in these cases.—Ed.]

The mixture of magnesia sulphate, sulphate of iron, sulphuric acid, and infusion of orange peel is of much service when there is a tendency to sluggishness of the bowels, which is not corrected by diet, etc., after a course of the pills mentioned.

The disease may be due to simple debility, in which case iron and other tonics are indicated.

Arsenic may be given as a modifier of the nutrition of the skin, but never as a curative agent or as a controller of congestion or inflammatory action.

Local measures are of as great importance as internal remedies in these cases. The soothing plan should be followed as far as possible. Hot water is a valuable remedy in relieving the congestion of the parts and the consequent itching, but it should be hot, not simply warm. The patient should sit on the edge of a chair and have a basin with very

hot water and a handkerchief in it. The latter is taken up and held in a mass to the an is or genital parts, as hot as can be borne, say for a minute, and then dipped in the water again, and the process repeated three times, the whole lasting not more than two or three minutes. Before the hot water is gotten ready, the ointment to be applied should be spread thickly on the woolly side of surgeon's lint, cut to fit the affected parts only, and put by for immediate use. After using the hot water, the parts are rapidly dried with a large, soft napkin pressed upon them, with *no* friction, and the ointment applied as quickly as possible, so as to exclude the air.

Ordinarily the hot water is to be used only at bed time, and the patient must not scratch the parts. But the hot water may be used more frequently if the itching recurs—though the ointment may be repeated once or twice during the day without the hot water. The ointment should never be rubbed in, but always spread on lint, and the fresh cloth should be ready to put on as soon as the other one is removed, in order to prevent access of air. Various ointments are used. A good one is—

- R. Unguent. picis..... $\bar{3}j$.
Zinci oxid $\bar{3}ij$.
Ung. aquæ rosæ (U. S. P.)..... $\bar{3}iij$.—M

This should be of consistence to spread easily and remain soft. Vaseline and cosmoline should not be used, as they rapidly soak in and leave the parts dry and exposed.

Another very effective ointment is—

- R. Unguent. picis. $\bar{3}iij$.
Unguent. bellad..... $\bar{3}ij$.
Tinct. acen. rad..... $\bar{3}ss$.
Zinci. oxid $\bar{3}j$.
Ung. aquæ rosæ $\bar{3}iij$.—M.

The ointment of chloral $\bar{3}ij$, and camphor, $\bar{3}j$ to the $\bar{3}j$, is an efficient antipruritic.

Lotions are often of service, especially in eczema of the penis and scrotum, and the following can be recommended:

- R. Bismuth subnit..... $\bar{3}ij$.
Acid hydrocyan. dil..... $\bar{3}j$.
Emuls. amygdal..... $\bar{3}iv$.—M.

This must not be used if the skin is much torn or broken.

When the congestion has ceased, and there is still some thickening and a tendency to slight fissures in the skin, the green soap, compound tincture of green soap may be used—

- R. Saponis viridis
Olei cadini.....
Alcohol.....*aa* $\bar{3}j$.—M.

With this we need friction; and a piece of muslin or flannel is wet with the lotion and rubbed briskly over the parts for a few moments, and then it is

well to use a mild ointment. For this the ordinary zinc ointment answers very well, or subnitrate of bismuth or calomel $\bar{3}ss$ to $\bar{3}j$ of unguentum aquæ rosæ. If a tendency to slight fissures of the skin still remains, we may touch the parts very carefully with the silver stick, and afterwards packing in a little cotton upon the parts. This must be used with caution.

Eczema of the female genitals presents some features still different from those in men, and is often very rebellious, but is, in the main, entirely amenable to very carefully directed treatment on the plan here detailed and that in a reasonably short time.—*L. D. Bulkley in N. Y. Med. Record.*

DIASTASIS OF THE HEAD OF THE FEMUR IN A CHILD.

Clinic by PROF. L. A. SAYRE, NEW YORK.

This case was that of a little girl eight years of age, sent on account of supposed hip-disease.

The father stated that she had always been lame, and that her left leg had always been shorter than the right. On examining her with great care no disease whatever of the hip-joint was found. The legs were parallel, and the shortened limb could be drawn to an even length. The leg could be flexed in every possible direction, but when the two were placed together the left leg was one and a half inches shorter than the other, and it lay perfectly parallel with the opposite limb; the foot was parallel also. If this had been the result of dislocation upon the dorsum of the ilium, the foot would be turned in; if it had gone on to the third stage of hip-disease, it would result in shortening of the head from absorption and enlargement of the acetabulum from carious degeneration, the foot would also be turned in and at the same time ankylosed more or less completely, and we would have that distortion or inversion and crossing of the limb peculiar to the third stage of hip-disease.

Standing the little child so as to expose her back, she had the appearance of lateral curvature, because the left leg was shorter and she was compelled to twist the pelvis to place the left foot on the ground. The lateral curvature depended, of course, entirely upon the shortened leg. The trochanter major on the left side was "clear up" near to the crest of the ilium, as was shown by Nélaton's test. The latter was given as follows: We pass a string from the tuberosity of the ischium around the thigh posteriorly to the anterior superior spinous process of the ilium, and if the femur is normal, the head in its acetabulum, that line ought to pass directly over the top of the trochanter major. That is called "Nélaton's test."

The trochanter was one and a half inch above that line. When the neck of the femur is broken the trochanter also rises above that line.

The case was diagnosticated not as one of diseased hip-joint but of diastasis. Nature had made an artificial joint, but not having any buttress, allowed the femur to glide upon the ilium, and had made the child lame and greatly deformed.

Dr. Sayre had made an instrument for bringing the limb down and retaining it there, so that nature might create a new joint in as favorable a position as possible.

In this connection allusion was made to a child brought to him when six years of age, in which he found there was no disease of the hip, but there had been a fracture of the neck of the femur. The leg was flexed nearly at right angles and quite firmly ankylosed. He broke up the adhesions, divided the tendons, and brought the limb to a natural position; then putting on a long splint, the leg was kept in that position until it formed an eburnated condition of the bone, and the head of the femur became rounded to fit this place, and made a perfectly good movable joint. The child ran around for some three years or more with simply a shortened limb, dying eight years after from a double pneumonia, and he obtained the ilium showing the acetabulum nearly obliterated. Previous to death, for two or three years the child could walk without any artificial aid whatever, with the exception of a high-heeled shoe to equalize the length of the limbs.

In describing the treatment, Dr. Sayre continued: Now, this is what I propose to do with this child. I intend to pull the limb out. Now, if I can keep it in that place and allow her to make free motion, it will thus give Nature a better opportunity for forming a new joint than if left to be pressed up on the dorsum of the ilium.

The instrument is simply a pelvis belt, with two perineal straps. On the outside of the distorted limb a shaft, as you see, runs down which connects with this belt by a moveable joint, and has at the same time a hinge which will either abduct or adduct, there is also a joint at the knee to allow the child to sit down; at the lower part of the shaft is another shaft running into the other, capable of adjustment, this terminates in a small axle running under the shoe, which axle fits into a little box. There is also a band which goes loosely around the knee to assist in retaining the instrument in position. In putting this instrument on, you have the pelvis belt go around just under the crest of ilium, and have the perineal bands buckled on either side, putting some soft rags between the bands and the perineum for a time every night with a little alcohol and alum.

Now the box for the axle being screwed fast to the shoe under the instep, the axle being slipped in and fixed, the pelvis belt fastened, and the perineal

bands buckled, the instrument is screwed out and adjusted by the application of a key. The limb is now extended until the trochanter major has passed nearly an inch below the lower border of the pelvis belt, which it remained against before the extension was applied.

Now, as the child stands up, you will observe that the limbs are of equal length and the lateral curvature has disappeared. The child then walked around with the greatest ease.

This is the first experiment on this child; had the case been diagnosticated earlier there would have been a much better opportunity to get a good result than there will now be.

CONSERVATIVE SURGERY IN CHRONIC DISEASE OF THE ANKLE-JOINT.

The case was a boy who had come to the clinic a year ago with chronic disease of the ankle-joint. The foot was a shapeless mass and intensely painful, with numerous sinuses leading to dead bone, and had been condemned to amputation by three of the surgeons of the hospital. Dr. Sayre was not aware at the time of their conclusion, and determined upon the removal of all diseased bone. The House Surgeon thereupon removed the os calcis, astragalus, cuboid, scaphoid, and cuneiform bones subperiosteally with the periosteum elevator, the os calcis being removed almost in its normal shape; the remaining bones were taken out in small fragments.

The wound was then thoroughly filled with Peruvian balsam, so that all parts were covered from the effects of the air: Listerism carried out to perfection, the creosote in the balsam being the antiseptic. It was then filled with oakum, which kept the heel in shape, a flannel blanket was drawn tightly over the whole foot, and the leg firmly encased in a plaster-of-Paris bandage, the foot being held firmly in the normal position. After the bandage was set a fenestrum was cut through on either side of the foot and a large wad of oakum placed in either fenestrum, a roller bandage was then firmly applied to the whole limb, the plaster casing protecting the limb from pressure over the fenestra, while the internal stuffing being made of picked oakum, percolation could take place and no danger of pyæmia or septicæmia was to be feared.

The oakum was removed every day, the amount reapplied being daily diminished as the cavity became filled with osseous matter, until the amount of oakum applied became merely a thread (movement being given daily to the foot). The sinus was completely closed and an almost perfect foot secured, with the exception that the heel did not project to the normal position, but the motions of the foot upon the leg were almost equivalent to a normal joint, and the child walked with scarcely a perceptible limp. The only defect was in the

inversion of his toes from want of power in the peroneal muscles to evert the foot. The application of a little elastic band from his shoe opposite to the little toe to the outside of the leg, by giving slight elastic force would guide the foot in the proper direction and enable him to walk almost normally.—*Med. Record.*

DILATATION AS A CAUSE OF CARDIAC HÆMIC MURMURS.—Dr. George W. Balfour has been led to adopt the theory of dilatation of the heart, as a cause of all cardiac chlorotic murmurs through the following considerations:

1. *This theory is alone capable of explaining in a rational manner all the discrepancies in the prevalent theories of these murmurs.* The aortic orifice has been most frequently mentioned as the seat of the hæmic murmur. But although it is a basic murmur, it cannot be located at the aortic valve, since at its first appearance it is not propagated along the aorta or into the carotids. Neither can it be at the pulmonary orifice, for though its position of maximum intensity is in the neighborhood of the pulmonary artery, yet there are no causes for a murmur here that are not equally operative at the aortic opening. It has been referred by some writers to the mitral or to the tricuspid valve, but the universally recognized basic position of the primary hæmic murmur excludes this theory. Thus the position of this sound has been referred in turn to each of the four cardiac orifices. The only explanation of such a discrepancy is that the hæmic murmur is one which may be audible in all the positions described.

2. *It is thoroughly consistent with the results obtained by experiment.* When Marshall Hall was investigating the effects of loss of blood upon the system he observed that in the reaction subsequent to such loss the heart's action was "accompanied by a peculiar noise resembling that of the saw or the file." He recognised also the identity of this sound with the chlorotic murmur. Beau determined the fact that the murmurs following loss of blood resulted, not from the primary anæmia, but from the secondary spanæmia, a condition to which he gave the name of "serous polyæmia." He also found that this condition of the blood was invariably associated with a dilated and hypertrophied heart.

3. *This theory is perfectly consonant with clinical experience.* It is known that in chlorosis a similar condition of the heart exists to that found in the "serous polyæmia" produced by repeated blood-lettings—dilatation and hypertrophy. The chlorotic murmurs are not due to anæmia, but to spanæmia, a condition in which the blood is not diminished in amount, though its nutritive and oxygenating properties are greatly lessened. The primary murmur in such cases is the venous hum

depending upon abnormal friction between the spanæmic blood and the venous walls. The next phenomenon observed is an accentuation of the pulmonary blood-pressure, the only possible cause for this being obstruction to the onward flow of blood. This latter, in a disease such as chlorosis, can only be due to a loss of tone and contractile force in the cardiac muscle. Less able to do its work, yet having no less work to do, the heart slowly dilates and at the same time slowly hypertrophies. As the heart dilates, the mitral and tricuspid valves become incompetent and give rise to murmurs. The regurgitation in the tricuspid causes pulsations in the jugular veins, and the abnormally large ventricular blood-waves give rise to systolic murmurs in the pulmonary and aortic areas. These murmurs are propagated along the carotids, and may be heard on the slightest compression in every artery in the body. Thus we have murmurs in every part of the heart in advanced chlorosis. The primary cardiac hæmic murmur is basic, is not propagated in any special direction, but radiates around the pulmonary area. On careful examination its position of maximum intensity is found to be the second interspace, from one to two inches to the left of the sternum. In this position the author states that he has always detected pulsation—at least during expiration. Occasionally this pulsation is so marked as to form a tumor, and has even been mistaken for an aneurism. Now, dulness and pulsation in this region are signs of dilatation of the left auricle; hence the author concludes that this murmur is propagated outward from the dilated appendix of the left auricle. This view receives further confirmation from a comparison of the primary chlorotic murmur with the similar murmur sometimes heard in mitral stenosis, which has been shown by Naunyn to be due to mitral regurgitation. The tense auricular wall is thrown into sonorous vibrations by the impinging blood-streams, the sound being conveyed to the chest-wall by the auricular appendix which lies in contact with it at the base of the heart. Since these two murmurs are similar in character and position, it is fair to assume that they arise under similar conditions.—*British Medical Journal*, August 26, 1882.

PAGET'S DISEASE OF THE NIPPLE.—It is of the utmost importance to come to a definite conclusion with regard to the nature of this disease, whether it is primarily of an eczematous nature ultimately terminating in cancer, or whether it is of a malignant nature from the outset, as the treatment of course, must vary according to the view we adopt. Prof. McCall Anderson has seen a number of cases of this disease and believes that in persons predisposed to cancer, any local irritant may determine an outbreak of the disease at the part irritated; thus we have frequently seen

an undoubted syphilitic disease of the tongue followed by cancer of that part, as the result of the long-continued irritation; and just in the same way it is possible for a simple eczema of the breast to prove the exciting cause of, and to be followed by, cancer of the mammary gland. But if we exclude these exceptional cases, we can arrive at no other opinion than that "Paget's disease of the nipple," is from the first of a malignant nature, and bears a somewhat similar relation to cancer of the breast that the so-called tylosis (or psoriasis) linguæ does to epithelioma of the tongue. Such being the case, it is of the utmost importance to distinguish true eczema of the breast from "Paget's disease of the nipple," towards which the following may be of assistance:

1. "Paget's disease of the nipple" occurs especially in women who have passed the grand climacteric. Eczema of the nipple and areola occurs especially in women earlier in life, and particularly during lactation, or in persons laboring under scabies.

2. Affected surface, in typical cases of Paget's disease, of brilliant red color, raw and granular-looking after the removal of crusts. Surface not so red and raw-looking in eczema, and not granular, but often punctated.

3. When grasped between the thumb and forefinger, superficial induration often felt, in Paget's disease, as if a penny were laid on a soft elastic surface and grasped through a piece of cloth (thin). Eczema is soft, and no induration.

4. Edge of eruption abrupt and sharply cut, and often elevated, in Paget's disease. Edge not so abrupt, and not elevated, in eczema.

5. Paget's disease is very obstinate, and only yields to extirpation or other treatment applicable to epithelioma generally. The other disease, although sometimes obstinate, yields to treatment applicable to eczema.—*Glasgow Medical Journal*.

THE DUTIES OF THE PHYSICIAN.—"Art is long, time is short, opportunity fleeting, experience deceptive, and judgment difficult." Such were the serious reflections of the father of medicine after he had labored with its problems many years, and accomplished more than perhaps any man who has practiced the healing art. In these days when so many doctors may be found who are little better than professional loafers, so many who discourage the reading of medical works, who express their contempt for original research and scoff at medical journals, regarding the accumulation of money as the only test of professional success, and who depend on their own personal shrewdness and gullibility of the people at large to excuse the title under which they thrive, the following, relative to the life of Dr. Geo. B. Winston, from the St. Louis *Courier of Medicine*, is refreshing:

A friend once remarked to him, "Doctor, what

necessity is there for this ceaseless labor and study at your time of life?" With a look of astonishment never to be forgotten he replied, "My dear sir I am under bonds to do it. When I offered my professional services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which human flesh is heir; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God would hold me responsible for the loss, through inexcusable ignorance of a precious human life, and punish me accordingly; and whenever I get my consent to be content with present professional attainments, and trust my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations which, with my best endeavors to meet them honestly and conscientiously, still sometimes is almost heavier than I can bear."—*Lou. Med. News*.

INFANTILE CONVULSIONS.—The adopted and regular treatment of M. Jules Simon, of the Hospital des Enfants Malades, for infantile convulsions, is as follows: On arrival, the first thing he orders is an injection of salt and water, salad oil, or glycerine, or honey, which he administers himself, as he has too often observed that the parents or the nurse have already lost their wits. If the teeth can be opened sufficiently, a vomitive is given, which clears the stomach of any food that could not be digested—the most frequent cause of convulsions. However, the attack continues but soon ceases on applying a handkerchief, on which a few drops of chloroform are poured, to the mouth, which the child inhales largely. If the convulsions reappear the anæsthetic is renewed, and the child is placed in a mustard bath for a few minutes, and then wiped dry and placed on his bed properly wrapped. Chloroform might be again administered if, after an interval, the child was seized again, and before leaving the nurse, M. Simon prescribes a four ounce potion, containing sixteen grains of bromide of potassium, one grain of musk, and a proportional preparation of opium, for he does not believe that the brain is congested in these attacks, it is rather excited, and the opium acts as a sedative. A teaspoonful of the mixture is given several times a day. On the following days the child is generally restless and irritable and ready to be attacked again, but a small blister about an inch square is applied to the back of the neck, and left on about three hours, when it is replaced by a poultice of linseed meal, and gives very satisfactory results. M. Simon, in terminating, says, "such is the treatment that I have instituted in my practice of every day."—*Proceedings King's Co. Med. Society*.

TREATMENT OF CHOREA.—Dr. Bouchut's treatment *par excellence* of chorea consists in the administration of hydrate of chloral in large hypnotic

doses, even for children. He orders for a child six years thirty grains in *one dose*, the dose to be repeated every day and increased if necessary to forty or even sixty grains. The effect of this dose is six or eight hours' profound sleep, during which the child does not stir. After a couple of days the disease abates, and in about a fortnight the cure is obtained.—*Medical Press and Circular*.

BORAX IN EPILEPSY.—Dr. Stewart Lockie reports, in the *British Medical Journal*, the case of a boy of seventeen who had been subject to epileptic seizures for four years. At the time of admission to hospital they occurred about once a week. Bromide of potassium seemed to have some slight controlling influence at first, but the frequency soon re-appeared. On Nov. 28th, 1881, borax, in fifteen-grain doses three times daily, was substituted for the bromide, and it has been continued, with an intermission of nine days, during which the bromide was renewed, to this date (Oct. 21, 1882). From the time it was commenced no serious fit has occurred, and for the last six months he has had no seizure whatsoever. No skin eruption occurred; vomiting took place occasionally, if the medicine was taken before meals, and at one period he complained of sleeplessness.—*Med. and Surg. Reporter*.

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.—Dr. Haley states, in the *Austrian Medical Journal*, that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy dull headache situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wine-glass of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who a quarter of an hour before was feeling most miserable, and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.—*Lancet and Clinic*.

GALVANO-PUNCTURE OF THE PROSTATE.—Dr. Bredert (*Klin. Wochenschrift*), reports five cases of senile hypertrophy of the prostate, in which either one or both lobes of the gland were enlarged. Catheterization was impossible or could only be performed with great difficulty by bending the instrument. Having regard to the use of electrolysis in other tumors, the doctor tried it in three cases with very good results in diminishing the size of the gland. A needle electrode, insulated except at its point, was pushed into the enlarged

gland, and was connected with the negative pole of the battery while the positive pole was applied to the abdomen. Diminution of the organ took place with astonishing rapidity in one case after the third application.

TREATMENT OF EXCESSIVE SWEATING.—In the *Michigan Medical News*, Dr. Currie says that for over thirty years he has used the following prescription, without a single failure, in sweats from whatever cause: Alcohol, Oj, sulphate of quinine, ʒj. Wet a sponge with it and bathe the body and limbs, a small surface at a time, care being taken not to expose the body to a draught of air in doing it. In one case a neighboring physician was poisoned while dressing a mortified finger. He suffered untold misery, and was drenched with perspiration for a number of days, and his life despaired of. When he saw him he ordered him to be bathed immediately in the above solution, and that this be repeated once in two hours. The third application stopped all perspiration, and convalescence began at once.—*Med. Surg. and Reporter*.

DIPHTHERIA—Dr. Lolli, of Trieste, uses exclusively the following mixture in the treatment of diphtheria, and in sixty cases the mortality was less than two per cent. the malady having a duration of but eight or ten days, and being but rarely propagated to the mucous membrane of the respiratory organs:

R—Ferri sesquichlorid. grs. xv.
Acidi carbol. pur. grs. xv.
Mel. rosæ, ʒ i.
Aquæ calcis., ʒ xv.

The throat is swabbed with this mixture every half hour, adults using it as a gargle, and it is, besides, to be taken in tablespoon doses, diluted, every second hour. Of course tonics and very nourishing food form most important adjuncts to the treatment.—*Journal Materia Medica*.

IODODORM SUPPOSITORIES FOR PILES.—R. Iodoform, ʒi; balsam of peru, ʒii; cacao butter, white wax, aa ʒiss; calcined magnesia, ʒi. Incorporate the mass thoroughly and divide into twelve suppositories. Insert one after each evacuation of the bowels and oftener if needed.—*Lou. Med. News*.

FISSURED NIPPLES.—Monti recommends that the nipples should be anointed with a (freshly-made) solution of gutta percha in chloroform, just enough of the latter being added to make the solution fluid. As it dries it forms a protecting pellicle, which does not come off even after suckling.—*Le Practicien*.

THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science
Criticism and News**

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHER, 16 Rue de la Grange Bateliere, Paris.

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THE PAST YEAR.

Another turn of the wheel has brought us to the commencement of another new year, which, it is to be hoped, we all enter upon with bright prospects and high anticipations. In passing in review the year that has just expired, we are reminded of the fact that the times change and we change with them, that life is short, and that little is accomplished, unless by great diligence we improve each moment as it passes. That whilst the labors of many minds in different departments, and of many even in the same department, give us after all no great addition to the stores of medical lore we formerly possessed, yet in many instances the advance has been sufficient to lead us to hope for still greater achievements in the years that are to come. The most marked attention which is being bestowed during recent years, and notably during the one just past to the study of pathology, or rather the cause of disease, is a most gratifying sign of the times and one which lends encouragement to the hope that sooner or later great discoveries in this field of enquiry will reward the diligent student.

The subject of State medicine has received considerable attention both at home and abroad. The Ontario Board of Health brought into existence during the last session of the Local Legislature has been organized and brought into working order, and already some good work has been accomplished, with a fair promise of much that is better yet to follow. A Sanitary Convention under the auspices of the Board was held in St. Thomas in the month of September, and although not a suc-

cess in the ordinary acceptation of the term, was at least a fair commencement in this regard. A recent deputation to Ottawa has been kindly received by the Dominion Government, and favored with the promise of an endeavour to do something in the way of collecting vital statistics, as a beginning, which it is hoped will result in the establishment of a Sanitary Bureau for the Dominion. The International Congress of Hygiene met in Geneva, and was largely attended by representatives from all parts of the world. Dr. Covernton of the Ontario Board of Health, was present as the representative, we may say, for Canada. (For report see LANCET for November.) The meeting was a most successful one, and will no doubt contribute largely to the advancement of this most important department of medicine, in those countries where it is still in its infancy. The next meeting of this Congress takes place in Hague, Holland, in 1884, and we venture to predict that there will then be exhibited a much greater interest in sanitary reform, and a still larger attendance of representatives than ever before.

The meetings of the various medical associations and societies have been as usual well patronized, and much good work has been done in the way of advancing the highest interests of the profession. The second annual meeting of the Ontario Medical Association took place in June and was largely attended. Dr. Covernton of Toronto presided and a large number of interesting and valuable papers were read and discussed during the two days the Association remained in session. We hope to see a still larger attendance of members next year, a greater interest manifested in the work of the Association, and an improvement in the character of the papers, which should as far as possible be made to embrace the individual experience of members themselves. Dr. McDonald of Hamilton was chosen president, and the next annual meeting was appointed to be held in Toronto, on the first Wednesday in June, 1883.

The Canada Medical Association also held its fifteenth annual meeting in Toronto during the first week in September, under the presidency of Dr. Fenwick, of Montreal, and continued in session three days. The attendance was the largest yet reached in the history of the association and the papers read were of more than ordinary interest. The association was divided into two sections—medicine and surgery, which were presided

over by Drs. McDonald and Grant respectively. This arrangement, which proved most satisfactory, gave ample time for the reading and discussion of the various papers presented. Dr. Carpenter of London, Eng., was present by special invitation, and gave a very interesting address on "Vital Statistics." A committee was also appointed at the close of the meeting to press upon the Dominion Government the necessity for the collection of sanitary statistics, and for the enactment of such sanitary regulations as may be necessary in the interest of public health. Dr. Mullin, of Hamilton, was elected president, and Kingston was chosen as the next place of meeting on the first Wednesday of September, 1883.

The American Science Association, also held its annual meeting in August last in Montreal, under the presidency of Dr. Dawson. Nine hundred and fifty members registered their names, and two hundred and fifty papers were received in the different sections. The business was conducted in nine sections, and many distinguished gentlemen were present, viz; Dr. Asa Gray, Dr. John Rae, Dr. W. B. Carpenter, Dr. Kovalevski, Dr. Koenig, Dr. Houghton and many others of equal celebrity. Prof. Young of Princeton was elected president, and the next meeting will be held in Minneapolis Min. In this connection we may also state that the British Association for the advancement of Science, purpose holding their meeting in 1884 in Montreal.

The American Medical Association held its thirty-third annual meeting in St. Paul, Min. in June and was largely attended, upwards of nine hundred members having registered their names. The two points of special interest in the proceedings were, first, the action of the association with regard to the admission of the delegates from the New York State Medical Society in consequence of the society having adopted a code of ethics which permitted consultation with all legally qualified practitioners. The motion was referred to the Judicial Committee which reported against the admission of the delegates and the matter dropped. Second, the question of establishing a weekly Medical Journal, similar to the *British Medical Journal*, instead of the usual bulky volume of transactions, and a board of trustees was appointed with instructions to ascertain whether or not the profession would give pecuniary support to

maintain a weekly journal. The result has been that a sufficient number of subscriptions have been guaranteed to warrant the committee in entering upon arrangements for its publication after June next. Dr. John Atlee of Lancaster Pa. was elected president for the ensuing year, and Cleveland was selected as the next place of meeting on the first Monday in June 1883.

The British Medical Association held its 50th, annual, or Jubilee meeting in Worcester England in August. Dr. W. Strange presided, and there were upwards of seven hundred and fifty members present. The President in his opening address referred to the formation of the association in 1832, and also to the distinguished galaxy of names that marked that decade in medicine: Lawrence, Abernethy, Cooper, Latham, Marshall Hall, Brodie, Watson, Barclay, Gregory, Munro, Knox, Bell, Allison, Christison, Graves, Stokes, Colles &c. besides many celebrated names on the continent. He also referred to the establishment of the *Lancet* as the leading Medical Journal and its power in breaking down monopolies and redressing abuses within and without the profession. The address in medicine was delivered by Dr. Wade of Birmingham and was a review of the therapeutical methods of half a century ago. He also enlarged upon the progressive nature of medical and therapeutical science not only in the matter of new drugs but also in our knowledge of how better to use old ones. Dr. W. Stokes, of Dublin, son of the celebrated Dr. Stokes, delivered the address on surgery, in which he also passed in review the chief advances in surgery during the last half century. Those to which he gave special prominence were the discovery of anæsthesia, the antiseptic treatment of wounds, and subperiosteal surgery. The address was most eloquently delivered, the Dr. proving himself an orator of more than ordinary attainments. The work of the association was transacted in eight sections, in which many highly interesting and important papers were read and discussed. The receipts of the association for the past year were about \$50,000, and the number of members upwards of 9500.

Another item of interest, especially to a certain section of the profession in Canada, was the semi-centennial celebration of the McGill College Medical School. The event was celebrated in a fitting manner by a conversazione and banquet, and was

largely attended by representative men from all the leading universities in Canada, and several from the United States. Messages of congratulation upon the substantial evidence of success which had attended their labors in the past, and good wishes for their future prosperity were received from friends of the college in all parts of the country.

One of the most important events in the history of medicine during the past year, was the discovery by Koch of the *bacillus tuberculosis*. The tubercle bacilli are rod-shaped, and vary in length from a quarter to half the diameter of the red blood-corpuscle. They are present in tubercular formations, and in the sputa of phthisical patients, and by inoculation of these organisms the disease may be reproduced. For a time Koch's discovery seemed to carry all before it, but the sober second thought of scientists began to doubt the reliability and practical value of Koch's observations. Dr. Formad, of Philadelphia, after a most thorough investigation, is unable to confirm the statements of Koch, and alleges that purulent matter of non-specific character, introduced into the blood of certain animals, will be followed by phthisis; while on the other hand Dr. Schmidt, of New Orleans, a reputedly able and skilful microscopist, tells us that the *bacillus tuberculosis* is merely a rod-shaped crystal of margaric acid. Whatever be the nature of these so-called organisms, it is a question whether they initiate the disease or are merely present as the result of the degenerative changes in the tubercular matter, and act as carriers of the infection.

In the early part of the year Bizzozero announced the discovery of a third blood-corpuscle, colorless, round or oval, and about one-half to one-third the size of the red corpuscle. It is said to be somewhat similar to, but not identical with, the third corpuscle of Norris, and is believed to play an important part in the clotting of the blood.

With regard to medicine, pathology and therapeutics, much progress has been made during the past year. The treatment of epilepsy by the bromides has been the subject of investigation by M. Hublé in the Salpêtrière, Ferrand, and Hughes Bennett. They all testify in favor of the bromides, although they have to admit many failures. Bromides of camphor, zinc, arsenic, sodium and potassium were the forms used. The first-mentioned was found especially useful when vertigo was a

prominent symptom, and as a sedative in cases of post-epileptic delirium and mania. The salt of zinc has a marked sedative influence on the medulla and spinal cord. It never causes cachexia or cutaneous eruptions. The bromide of arsenic in one grain doses greatly diminishes the frequency of the seizures. The bromide of sodium does not produce the profound cachexia which is sometimes produced by the potassium salt. Atropine has been used with very good success by Laskiewicz and Köllner in the treatment of epilepsy, when the bromides fail. Köllner injects subcutaneously about one-sixteenth of a grain, and states that it reduces the frequency and severity of the attacks, and the mental condition of those so treated is better than those treated by the bromides. Edlefsen and Benedikt have used *curare* in the treatment of old and severe cases, with great benefit. It may be given subcutaneously in doses of one-thirtieth to one-twentieth of a grain. *Picrotoxine* is another remedy which has been used in this affection. Conyba reports a case where a cure was effected after four years treatment with this remedy. Dr. Alexander, of Liverpool, (*Medical Times and Gazette*), has treated a number of inveterate cases of epilepsy by ligature of the vertebral arteries. The success has been such as to warrant the procedure in certain cases which are not benefited by medical treatment. In the treatment of pneumonia bleeding has come into more frequent use as a means of lowering blood-pressure in all previously healthy adults. Dr. Alix, of Toulouse, (*Bull. Gen. de Therap.*) brings forward statistics to show the advantage of a liberal use of alcohol in the treatment of pneumonia. The use of the cold wet-pack has also been advocated by Dr. Flint, in the treatment of this disease. The directions are to employ the wet sheet whenever the axillary temperature goes above 103° F., the patient to remain in the sheet until the temperature falls to 102°. The subcutaneous injection of from 10 to 20 minims of sulphuric ether in the adynamic form of pneumonia has been attended with very beneficial results in several most unpromising cases, and is deserving of more general use.

Some interesting observations have been made regarding the presence of micro-organisms in croupous pneumonia. Observers have been at work in this field ever since the discovery by Reckling-

hausen of a micro-organism in erysipelas, and recently Friedlander, of Berlin (*Virchow's Archiv.*) has been rewarded by the discovery of micro-organisms in several cases of acute pneumonia. They were found in pairs, and sometimes in long chains, and especially numerous during the stage of red hepatization; also in the lymph spaces of the interstitial connective tissue, thus showing that they can pass into the current of the circulation and develop in the living tissues.

The treatment of phthisis by inhalation has received a fresh impetus since the discovery of the tubercle bacillus by Koch and Baumgarten. There can be no doubt that as an adjunct to other treatment it will be of great utility, but it can never take the place of constitutional and general treatment. Fränkel recommends the injection of antiseptics into the lung tissues in phthisis, foetid bronchitis, and gangrene of the lungs. In a patient with foetid expectoration he injected fifty minims of a five per cent. solution of carbolic acid. No fever or reaction followed. These injections are supposed to set up inflammatory action, and as a result cicatricial bands are formed which limit the tubercular process.

The investigations of Drs. Wood and Formad regarding the contagium of diphtheria seem to point to the identity of croup and diphtheria, and that all forms of inflammation about the throat and larynx are the same in kind, differing only in intensity, inasmuch as the micrococci in diphtheria are identical with those found in all buccal and pharyngeal inflammations, however slight. Micrococci are only found disseminated in the blood and tissues in the virulent forms of the disease, and their power of reproduction is most marked in malignant cases.

In the treatment of delirium tremens, Dr. Latham (Cambridge Med. Society) recommends in all cases the continuance of the accustomed stimulus, for a time at least, and that opium should be given very guardedly to those of broken down health and diseased organs.

In the treatment of acute rheumatism, salicin and the salicylates have nearly replaced all other methods of treatment. The results have been for the most part tolerably uniform and eminently satisfactory. It is especially in those cases of rheumatism which are characterized by the greatest acuteness and the highest temperature that these

remedies have achieved their most signal triumphs. Dr. Broadbent maintains, and his observations are borne out by our own experience, that when the salicylic compounds fail to control the disease at once, nothing is gained by their continued administration. He also gave it as his opinion that they had no influence upon the course of pericarditis or endocarditis; but that when used early they prevented the occurrence of these complications by hastening the termination of the disease. Dr. Green (*Practitioner*) recommends very highly, nitroglycerine in certain forms of heart-disease, especially angina pectoris. The dose is one drop of a one per cent solution in alcohol. The attacks may be warded off by the continuous administration of the remedy every three hours.—Dr. R. S. Smith, (*Brit. Med. Journal*), gives detailed histories of three cases of diabetes in his own practice, which all showed marked improvement under the influence of codeia. The improvement ceased immediately when the agent was withheld, and was renewed on its repetition. Dr. Owen. (*Ind. Méd. Gazette*), reports on the treatment of acute dysentery by aconite, based on one hundred and fifty cases. He gave it in minim doses (B. P.) every fifteen minutes for the first two hours, and after that, one minim every hour. The results were, according to his analysis of the cases, very satisfactory. In the *Bull. Gen de Therap*, M. Desplats gives his experience in the treatment of 51 cases of typhoid fever with carbolic acid. He asserts that after each dose the temperature falls and the nervous symptoms abate, and the condition of the patient is greatly improved. Dr. Balfour (*Brit. Med. Journal*), adduces the theory that dilatation of the heart is the cause of the so-called hæmic murmurs. He ascertained by experiments on animals, that the condition productive of a murmur is not properly one of anæmia, but of spanæmia. In this state, the cardiac muscle being relaxed and the volume of blood increased, a certain amount of dilatation was inevitable, and the current of blood regurgitating through the dilated mitral orifice sets the relaxed auricular wall into vibration, and thus produces a murmur. The use of caffeine in cardiac disease is strongly recommended by M. Huchard (*Union Méd.*) It acts more rapidly than digitalis, and in fatty heart, where the latter is contraindicated, it unquestionably does good. The dose recommended is four,

five, or even ten grains, five times daily, if necessary to produce the desired effects. He prefers caffeine to any of its salts. Dr. Fenwick (*LANCET*) in a paper on "Venesection in Heart Disease" says he is convinced that in valvular stenosis great benefit is to be derived from occasional blood-letting, if dyspnoea, pain, or urgent symptoms be present; also in cases of valvular incompetency if urgent dyspnoea, or cyanosis exist; and in cases of acute pericarditis or endocarditis. In *Wien Med. Woch.*, Dr. Benyan recommends the use of iodoform in the treatment of diphtheria. He applies it locally in powder, pure, to the patches of membrane with a camel's hair pencil every two hours.

In the field of surgery, general and orthopædic, much valuable and important work has been accomplished. Nerve stretching in cases of locomotor ataxia, obstinate cases of sciatica, neuralgia, etc., which is still on its trial has been practiced frequently during the past year, but the results have been far from uniform in favor of the procedure. In some instances fatal results have followed the operation. Sponge-grafting has received attention from Dr. Hamilton (*Edin. Med. Jour.*). Noticing carefully the part played by a blood-clot or fibrinous exudation in the healing of a wound, as compared with the process of vascularization on a granulating surface, it occurred to him that if he could employ some dead porous animal tissue it would in course of time become vascularized and replaced by cicatricial tissue. He therefore introduced small pieces of clean sponge, in a wound under treatment. The sponge was prepared by washing out the calcareous matter by means of dilute nitromuriatic acid, and subsequently washing in liquor potassæ and carbolic acid solution 1 to 10. After a time the interstices of the sponge were filled with organizing tissue, and as soon as it became vascular the epithelium spread over it and the healing process was gradually completed. In intractable cases of club-foot, Mr. Davy, of London, removed a wedge-shaped portion of the tarsal arch by means of a fine saw, the wedge in most cases including a portion of the astragalus, os calcis, cuboid, and scaphoid bones. Although it seems a somewhat severe operation, the results obtained by Mr. Davy would seem to warrant the procedure in certain intractable cases in patients not too young. Bony union results, but even should that fail, fibrous union would suffice. Dr. Phelps, of Chateaugay,

N.Y., recommends a new operation for club-foot, which consists in dividing *all* the resisting tissues across the sole of the foot down to the bones, and leaving the wound open, to heal by granulation. He claims very good results by this treatment, but it seems entirely too severe, and is not likely to find many advocates.

Several cases of gastrostomy have been recorded during the year. Most surgeons recommend stitching the stomach to the abdominal wall and leaving it thus for four or five days before opening, while Dr. Kraske (*Centralblatt*), on the other hand, advises immediate opening, on the ground that there is danger of the contents of the stomach escaping through the stitch punctures and exciting peritonitis. Prolapsus ani has been successfully treated by M. Vidal, by means of injections of ergotine into the protruding parts. He recommends this plan in long-standing cases, and says a cure may be expected in a few weeks. Mr. Haward (*Clin. Society, London*), reports a case of splenectomy for enlargement. The operation was most successfully and skilfully performed, but the patient, while the wound was being closed, showed signs of collapse, but was revived by artificial respiration, and subcutaneous injection of ether. Five hours after the operation vomiting commenced and she died the same evening. Mr. Marshall (*Lancet*); has performed an *unsuccessful* operation for excision of cancerous stricture of the descending colon, which he terms "colectomy," to designate the operation. The diseased mass which was removed with a piece of the intestine, was about one inch and a quarter long. Mr. Bryant has also performed a very successful operation for the removal of an annular stricture of the descending colon. The operation was the ordinary one for colotomy. This operation Mr. Bryant states was the first of the kind done in England. Mr. Harrison, of Liverpool, (*Lancet*), describes a new operation for the radical cure of varicocele. He exposes the cord by an incision about an inch in length, and separates the veins which are each tied in two places by a catgut ligature. To the small veins about the epididymis he applies the thermo-cautery. Dr. Sidney, (*Lancet*), recommends the subcutaneous application of ligatures to the veins when required in the treatment of varicocele, varicose veins of the leg, etc. Three antiseptic agents have been introduced into surgery, viz., glycero-borates of calcium and sodium,

and boro-glyceride. They are, it is claimed, very efficacious and free from all irritant or poisonous effects. The two former are powerful antiseptics, very soluble in water, but the latter is more soluble in glycerine.

The treatment of anthrax by the injection of a five per cent. solution of carbolic acid has been brought prominently into notice by Dr. Lopez Rubio (*El Sig. M.d.*). The injection was made subcutaneously into different parts of the carbuncle, and had the effect of checking its progress and rapidly diminishing its size. Other observers have had equally striking results from this method of treatment. Dr. Kelly, of Dublin (*Dublin Four. Med. Sci.*) advocates a new method of reducing dislocations of the humerus and femur, an illustrated description of which will be found in the present number. Several cases of removal of portions of the intestine for stricture and strangulated hernia have been reported; two or three very interesting cases will be found in the October number of the *N.Y. Med. Record*, by Dr. Fuller, of Grand Rapids, Michigan. One was a case of strangulated hernia, in which the Dr. removed five and a half inches of the bowel which was gangrenous. Another was a case of invagination, in which four inches were removed. In a third case a portion of omentum was cut off and the bowel returned.

In obstetrics and gynecology many interesting cases have been reported during the year, but we have only space to mention a few of them. The use of antiseptics in midwifery practice has come to be regarded as a *sine qua non*, if we are to use all means to prevent septicæmia. A new method of introducing perchloride of iron into the uterus has been proposed by Dr. Von Teutleben, of Berlin. It is prepared in the form of solid sticks, and introduced into the cavity of the uterus by means of a porte-caustique. It may be partly withdrawn again to remove any clots, and then reintroduced and allowed to remain. Capillary drainage after laparotomy has received considerable attention from Prof. Hegar. His method consists in the use of a glass drainage tube inserted into the wound, and plugging its outer extremity with absorbent carbolized cotton. This is changed frequently for the first twelve hours, and when the discharge ceases the tube is removed. Strands of cotton wick, enclosed in rubber tubes, have also

been used for the same purpose with advantage. Chian turpentine, which was so much vaunted by Dr. Clay, of Manchester, has been fairly tried and found valueless in other hands.

Dr. Baker, of Boston, publishes a very interesting paper in the April number of the *Am. Four. Obstet.* upon the early, complete, and repeated removal of cancer of the uterus. He recommends the entire removal, when practicable, of the cervix on a level with the os internum when this is the seat of the disease; and where it is impossible to remove the whole of the disease, he advises the free use of the curette, followed by the thermo-cautery, for the sake of the relief which is afforded the patient, and also the prolongation of life. His practice in these respects does not differ much from that of the leading gynecologists of the day. Credé (*Archiv. f. Gynæk.*) gives his method of preventing ophthalmia neonatorum, which consists in cleansing the eyes with warm water immediately after birth, and dropping a single drop of a two per cent. solution of nitrate of silver into the eye. This plan has been adopted in several hundred cases, and in no single instance has the disease appeared during the first seven days. When the disease appears later Credé attributes it to some other cause than infection from the mother. Dr. Frank has cured a case of incontinence of urine in a woman, by removing a portion of the posterior wall of the urethra and thus narrowing the canal. The wound healed without a fistula, and the case was successful in its results. Dr. Fehling (*Arch. f. Gynæk.*) disapproves of rapid dilatation in stenosis of the cervix uteri, and advocates several longitudinal incisions, the knife being drawn from the os internum downwards. A glass tube, with holes in the sides, is then inserted and retained in position with a tampon. The tube is removed on the fifth day and a laminaria tent introduced, and dilatation kept up until the canal is of the proper calibre. Dr. Thornton (Obstet. Society) reports a case of extra-uterine pregnancy treated by antiseptic abdominal section with removal of the fœtus and the hypertrophied placenta, ending in recovery of the patient. He has also succeeded in successfully ligating the arteries of the uterus and ovaries, for the cure of fibroids. Dr. Alexander has proposed and carried into effect a new operation for certain displacements of the uterus, which the author assumes is caused by the laxity of the round ligaments. He makes an inci-

sion over the external abdominal ring, seizes the round ligament and shortens it by stitching it to the tissues around the ring. Dr. Adams (*Glasgow Med. Jour.*) had devised and performed the above operation, but was anticipated by Dr. Alexander's reported cases. Dr. Orsby (*Med. Record*) mentions five cases of dysmenorrhœa, which were successfully treated with calomel combined with opium. He regards the known efficacy of calomel in all hyperplasias as justifying its use in a complaint in which the hyperplastic element is recognized by all pathologists, and his experience confirms this view. Iodoform, which has been extolled so much of late in the treatment of surgical wounds, etc., has also been introduced into gynecological practice and the results of its use are said to have been very satisfactory. Dr. Fordyce Barker gives a case of chronic membranous dysmenorrhœa—which was completely cured by the introduction of a cone of iodoform into the cavity of the uterus every second day. It is also recommended by Weissenborg and others in chronic endometritis. It is used in gynecology in different forms—as a liquid, in solid cones, and in some instances it is blown into the uterus in powder. It may be rendered inodorous, by mixing half a drachm of balsam of Peru to the drachm of iodoform. Iodoform has also been used by Dr. Fraenkel, for the purpose of rendering sponge tents aseptic. The tents are first smeared with cerate or vaseline, and then coated with iodoform. They will be found on removal after 12 to 24 hours to be perfectly free from putrefactive odor.

A new sign of pregnancy has been observed by Jorissenne (*Archir de Tocologie*). He maintains that while in health there is, as is well known, an increase in the number of pulsations of from five to ten beats in the erect as compared with the horizontal posture; in pregnancy the number of pulsations are the same without regard to position. At the last meeting of the British Medical Association Mr. Lawson Tait read a paper on "One hundred consecutive cases of Ovariectomy without any of the Listerian details. The mortality was only three per cent. Mr. Tait attributes his success to the abandonment of the clamp, the adoption of Keith's and Kœberle's method of carefully sponging out all fluid from the peritoneal cavity, complete abandonment of carbolic acid, and careful after-treatment.

The following new books and new editions of old ones have appeared during the year:—Midwifery, by Glisan; Eczema, by Bulkley; Diseases of the Nervous System, by Hammond; Manual of Histology, by Satterthwaite; Anatomy of the Nervous System, by Ranney; Diseases of Infancy, and Childhood, by J. Lewis Smith; Diagnosis and Treatment of the Chest Throat and Nasal Cavities, by Ingals; Treatise on Hernia, by Warren; Landmarks, Medical and Surgical, by Holden; Opium Habit and Alcoholism, by Hubbard; Epilepsy and other Convulsive Diseases, by Gowers; Science and Art of Midwifery, by Lusk; System of Surgery, 3 vols., by Holmes; Nurse and Mother, by Coles; Treatment of Hydrocele and Serous Cysts in General, by Levis; Chloral Hydrate in Diabetes, by Eckhard; Law of Slander, as applicable to Physicians, by Whittaker; Principles and Practice of Medicine, by Hartshorne; Nervous Diseases, by A McLane Hamilton; Students' Manual of Venereal Diseases, by Hill & Cooper; Handbook of Diseases of Women, by Brown; Electricity, by Rockwell; Index of Surgery, by Keetly; Diseases of the Eye, by Mauthner; Human Physiology, by Dalton; Surgical Disorders of the Urinary Organs, by Harrison; Uterine Therapeutics, by Tilt; Diseases of the Eye, by Noyes; Diseases of Children, by Henoch; Suppression of Urine, by Fowler; Elements of Pharmacy, Materia Medica and Therapeutics, by Whitla; Incidental Effects of Drugs, by Lewin; Tumors of the Bladder, by Stein; Health and Healthy Homes in Canada, by Dr. Sproule, Peterborough, Ont.; Philosophy of Insanity, Crime, and Responsibility, by Dr. H. Howard, Montreal; Physical Diagnosis, by Dr. Bruen; Chemical Analysis of Urine, by E. F. Smith; Hemorrhoidal Disorder, by Gay; Diseases of Women, by Edis; Encyclopædia of Surgery, by Ashhurst; Cancer of Breast, by Munn; Organic Materia Medica, by Maisch; Homœopathy: What is it? by Palmer; Physiology, by Ashby; Text-book of Physiology, by Foster; Manual of Obstetrics, by King; Physiological and Therapeutical Action of Sulphate of Quinine, by Mason; Hypodermatic Medication, by Bartholow; Labor among Primitive People, by Englemann; Diseases of the Skin, by Duhring; Compend of Anatomy, by Roberts; Slight Ailments, by Beale; Cutaneous and Venereal Diseases, by Piffard; Nitro-Glycerine as a Remedy

for *Argina Pectoris*, by Murrell; *Course of Medical Chemistry*, by Draper; *Transactions of American Gynecological Society*, etc., etc.

During the past year the following among others of the profession, have ceased their labours:—Drs. E. Cook, Norwich; J. Allen, Adolphustown; J. B. Smith, Jerseyville; G. Lount, Norwich; A. J. Whitehead, Toronto; W. Philip, Manilla; H. H. Boulee, New Hamburg; W. Wilson, Dorchester, N. B.; J. P. Lynn, Toronto; C. W. Hiltz, Chester, N. S.; A. R. Lander, Frankville; W. Weir, Merrickville; H. Yates, Kingston; H. Orton, Ancaster; — McCay, Blairton; P. A. Munro, Montreal; F. H. Wright, Toronto; H. Bingham, Manilla; A. McKay, Beaverton; G. W. Campbell, Montreal; A. Maxwell, Bear River; J. McMurray, Toronto; H. H. W. Lloyd, Colchester; H. E. Bissett, Hawkesbury; T. Blackwood, Pakenham; J. Salmon, Simcoe; A. Greenlees, Toronto; R. H. Wight, St. John's Que.; J. B. Bond, Yarmouth, N. S.; B. G. Page, Halifax, J. N. Reid, Thornhill; Hon. Dumouchel, St. Benoit, Que.; S. Richardson, Galt; A. H. David, Montreal; J. R. Dickson, Kingston; J. Fraser, Font Hill; E. Henwood, Hamilton; Hon. D. Campbell, Port Hood, N. S.; W. H. Bacon, Brantford; J. A. Sinclair, Colborne; R. P. Morden, London; W. Milne, Claremont; Thos. Payne, Sr. Toronto.

Among those who have passed over to the majority in other lands, may be mentioned Mr. South, F. R. C. S., Lon.; Profs. Draper, jun. and sr., New York; Pirogoff, Schwann, Sir Robert Christison, Dr. Joseph Pancoast, Dr. Geo. Budd, Dr. J. Hodgen, (St. Louis), Prof. James R. Wood, Dr. John Brown, (Edin.), Sir John Rose Cormack, Prof. Spence, (Edin.), Dr. Peacock, Dr. Andrew Buchanan, (Glasgow), Friedreich, Dr. W. H. Mussey, (Cincinnati), Prof. Balfour, (Cambridge), Mr. Clover, Mr. Critchett, Sir Thomas Watson, Prof. Pirie, Dr. S. W. Thayer, (Burlington), Prof. J. For-syth Meigs, Philadelphia and many others.

While the past year has not been prolific in great conflicts and catastrophes, it has yet had some worthy of notice. The war in Egypt, to which all eyes were directed for a brief period, and which at one time appeared as if it might involve all Europe in a clash of arms, was brought to a successful issue without very great sacrifice of human life. The medical corps in that campaign, although it received scant justice from the English

press, did its work admirably, and reflected great credit upon those in authority. The foundering of the steamer *Asia*, in the Georgian Bay, and the terrible suffering and loss of life, are still fresh in the memory of our readers. That such coffins should be allowed to carry loads of freight and passengers, or even to go to sea at all in such a condition, reflects seriously upon our system of steamboat inspection. The terrible holocaust attendant upon the burning of the Poor Asylum in Halifax, N. S., is another instance of the want of care and forethought on the part of those in authority, and one that imperatively calls for more thorough Government inspection in all matters affecting the lives and comfort of our fellow-beings. A local outbreak of small-pox at Windsor, Ont., and similar outbreaks of typhoid fever and diphtheria in different parts of the Dominion, occurred during the year, but none of these were of very serious import. With these exceptions we may say that the health of the country was very good, trade flourishing, and the people prosperous and happy. In conclusion we wish our readers a happy and still more prosperous and propitious time in the new year upon which we have entered.

CO-EDUCATION IN MEDICINE.

The co-education of the sexes in medicine which has been on its trial in the Kingston Medical College, has, as was presaged by experienced educators, resulted in complete failure. The dissatisfaction which was felt by the male students for some time past in regard to joint attendance upon lectures, which had to be modified, and in some respects curtailed by reason of the presence of ladies, finally culminated in open rebellion. This action on the part of the male students was precipitated by the conduct of the ladies in rising up and going out in a body during Dr. Fenwick's lecture on physiology, because of some statement of fact in connection with the subject in hand which the students applauded, and at which the ladies took offence. These are the true facts of the case so far as we can glean, so that it is wholly a gratuitous assumption on the part of the friends of co-education of the sexes in medicine, to endeavor to lay the blame upon Dr. Fenwick and those medical colleges which were prepared to admit the students *ad eundem statum* when it was believed they had

actually left the Kingston school. As a good deal of misapprehension seems to have gained currency regarding the action of Trinity Medical College in this matter (although its position was precisely similar to that of Bishop's Medical College, Montreal, and the Western University Medical School), we are authorized to state that Trinity College in no way interfered in the quarrel, or gave the students any encouragement in their revolt. The authorities of Trinity Medical College received a telegram from Kingston, stating that a number of the students *had left the Kingston School*, and asking upon what terms they would be received into Trinity School. This, with no knowledge of the disturbance or its cause, was taken as proof that there had been some trouble that had ended in this unfortunate way. Under this impression the telegram was answered, stating the conditions on which students believed to have actually left their school might be received into Trinity. These were the same as had been laid down when, on the breaking up of the old Victoria Medical School, many of the students joined Trinity. Very soon the Trinity authorities found that the telegram had somewhat misled them, and that the trouble was not ended, but in progress, and that appearances seemed to indicate a possibility of its being all smoothed over. Immediately on this being known, the students at Kingston were congratulated by letter on the improved state of things, so different from what the telegram had seemed to indicate, and they were told that the telegram would not have been answered at all, had it not been supposed that the trouble had ended, and the hope was very warmly expressed that the future of the school might be even more prosperous than the past.

While we firmly believe in the principle of higher education for women, we have no faith in the success of the scheme for the co-education of the sexes in arts and medicine, now being pressed upon the attention of the college authorities. It can have but one result, which has already been manifested in the Kingston embroglio. With the view of obviating this and similar difficulties, we would suggest the establishment of a female medical college.

Mr. Labouchere, member of Parliament, lately stated in the House of Commons, "as a statistical fact, that those who wish to live long ought to sit up late."

VITAL STATISTICS.

On the 6th ult., a meeting of delegates from the various boards of health and municipalities in different parts of the Dominion waited upon the Minister of Agriculture in Ottawa, in reference to the establishment of Bureaus of Health Statistics for the various Provinces of the Dominion. It was urged that a measure should be introduced during the coming session to provide for the establishment of offices for the collection of health statistics in all the principal cities and towns of the Dominion, and that the \$10,000 voted last session in aid of such purpose should be supplemented by at least "another \$10,000." Boards of health are at work in Montreal, Ottawa, Toronto, Quebec, St. John, Halifax and Charlottetown, but with the formation of a Dominion Board of Health the statistics collected by these boards, and by others that may be formed, can be forwarded to Ottawa.

The following are the names of the gentlemen who composed the delegation: Col. Stevenson, Alds. Mooney, Boxer, Beaudry, Fairbairn, and Drs. Hingston, Howard, Larocque, Campbell and Mount, Montreal. Mayor Langelin and Drs. Roy, Rinfret and Dionne, Quebec. Drs. Canniff, Oldright, Playter and Geo. Wright, Toronto. Drs. Grant, Sweetland, S. Wright, H. Wright, Hill, Small, Valade, Robillard, Mark and Horsey, Ottawa. Mayor Fraser, Maloy, M.P.P., and Drs. Wickwire, Almon, Moren and Farrell, Halifax. Drs. Botsford, Bayard, Harding and Daniel, St. John, N.B. Dr. Conroy, Charlottetown, P.E.I. Dr. Orton, Fergus; and Dr. McDonald, Londonderry, N.S.

A deputation of the kind was proposed many months ago, but only quite recently was any decisive action taken in the different cities; and it was chiefly from the Montreal Board of Health that invitations were issued to the other boards. Some of the delegates urged the view that the statistics ought to be collected at once, as well from the rural districts as from the cities; and it required a good deal of argument to convince them that, while every one present desired that the statistics should be collected from the entire Dominion as soon as it were possible for the Government to adopt means for the purpose, it had been stated by Ministers that it would be quite impossible to

undertake this at present, as Parliament could not be expected at the present time to grant the very large sum of money which the work would require, and that all the Government could do now would be to make a commencement of the work of collecting. No one could dispute that under these circumstances it would be best to commence with the principal cities, whence, as the value of the returns obtained became manifest, the system could and would be extended to all parts of the country.

The delegates from Ontario and the Eastern Provinces were desirous that the Government should undertake, besides the collection of vital statistics, some other public health work, and take steps for the formation of a central bureau or board of health.

The following resolutions were eventually adopted :

Resolved,—That, in the opinion of the meeting, in order the better to prevent disease and preserve human life, it is advisable that the Dominion Government should organize and sustain a uniform system of vital statistics for the Dominion.

Resolved,—That, as immediate action is necessary, the Federal Government be invited to initiate at once a system of vital statistics where organized local boards of Health are established, so that the statistical information may be utilized by these bodies.

Resolved,—That, as Provincial legislative action is necessary, it is suggested to the Federal Government that it communicate with and secure the co-operation of the Provincial Government to pass such legislation as will harmonize with and obtain the object of the preceding resolutions.

Resolved,—That it is desirable that a central bureau of statistics be established, and if found to be within the province of the Federal Government, a comprehensive system of health returns.

Resolved,—That inasmuch as it appears by the British North American Act that matters of public health are delegated to the Local Government, this delegation has not included it with the subject of vital statistics ; nevertheless, they are of the opinion that it would have been better had it been under the direction of the Federal Government, and beg to suggest that an effort be made to obtain an amendment to the constitution in that direction.

Dr. Tache, at the close of the session, informed the deputation that he believed the Government would at once commence the collection of vital statistics in the capital cities of the Dominion, and all cities with a population of 25,000, and the appropriation of last session would probably be spent in furtherance of this object. The Hon. Mr. Pope entertained the delegates at dinner at the Russell House.

ROGERS' GROUPS.—One of the latest groups by this eminent artist is a Shakesperian one, and represents Othello, Desdemona, Cassio and Iago, at the time when the latter discovers Desdemona and Cassio in the garden together, and first excites Othello's suspicion by exclaiming : " Ha ! I like not that." Rogers' groups are now so well and favorably known both in the United States and Canada, for their natural perfection and artistic beauty, that they require scarcely a word from us in regard to their merits. They will form a most fitting Christmas present or New Year's gift, and become an heirloom in the family, a " thing of beauty and a joy for ever." See cut among advertisements.

R. H. RUSSELL, M.D., M.R.C.S., ENG.

One of the most prominent physicians in Quebec has passed away at the age of 63 years. Dr. Russell, who died on the 7th of December, practiced his profession in the ancient capital for upwards of 40 years. His name was almost a household word, and he enjoyed the confidence alike of the public and the profession in the highest degree. He was an M.D. of Edinburgh and M.R.C.S. of England, having studied his profession for many years under Dr. Douglas, of Quebec, and having obtained the medals of Sir James Simpson in obstetrics and gynecology, and the Munro prize in anatomy, as well as various other distinguished prizes. He took a warm interest in matters relating to the welfare of the profession. He was an ex-President of the College of Physicians and Surgeons of Quebec, and a Governor of that body for over thirty years. He was also an ex-President of the Quebec Medical Society, one of the originators of the Canada Medical Association, and was the first treasurer of that body. During the rebellion of 1837 he acted as surgeon to the celebrated loyal corps known as " Bell's Cavalry." He was an active, stirring character, who took a prominent share in the current events of his day. He was possessed of much originality, as well as great energy and independence of thought. His death is universally regretted, and leaves a blank which will not be easily filled. His brother, Dr. J. P. Russell, is one of the leading physicians of this city, and his son Dr. Henry Russell, of Quebec, is a worthy descendant of the good old stock.

ONTARIO BOARD OF HEALTH MAP.—Our city contemporary (December) says that "several persons have spoken to us about the unjust criticisms of the LANCET on this subject. That disinterested persons to whom it was shown declared in favor of the map as compared with the slips issued by the Michigan Board, and concluded with the choice remark that the *LANCET's* spleen is seemingly not yet frothed out." The *Medical News*, Philadelphia, (Dec. 16), one of the most independent medical journals in the United States, after briefly describing the map says: "But the reader wants naturally to know on what data the official announcements are made. As a health bulletin we are inclined to prefer Dr. Baker's statements of prevalence in Michigan." To use the elegant phraseology of our contemporary, What is the *News'* "spleen seemingly frothing out about"?

OBITUARIES.—Sir Thomas Watson, Bart., M.D., F.R.S., author of the "Principles and Practice of Medicine," died during the past month at the advanced age of 90 years. He was elected a Fellow of the College of Physicians in 1826, and was President of that College since 1862. He was for some time Professor of the Practice of Physic in King's College, London, and was appointed one of the Physicians-in-Ordinary to Her Majesty in 1870. He was created a baronet in 1880.

Prof. Wm. Pirrie, of Aberdeen, Scotland, died on the 21st of November at the age of 75 years.

Dr. S. W. Thayer, of Burlington, Emer. Prof. of Anatomy in the University of Vermont, died on the 14th of November, aged 65 years.

The death of Dr. J. Forsyth Meigs, of Philadelphia, from pneumonia, is announced in our exchanges.

We regret to learn that the Hon. Dr. Ross, of Three Rivers, Que., has been seriously ill, but is now in a fair way of recovery. Dr. Dow, of Fredericton, N. B., has also been so low that his life was despaired of, but is happily recovering.

Alex. Jamieson, B.A., M.D., (McGill), has been appointed Prof. of Chemistry and Physiology in the University of Kansas City.

As we go to press we learn with deep regret of the death of Dr. Pyne, Sr., former Registrar of the Ontario Medical Council.

DIRECTORY FOR NURSES.—A Directory for nurses has been established under the auspices of the Toronto Medical Society. It will be in charge of Dr. McPhedran, 7 Wilton Avenue, and will be open at all hours of the day and night. Persons in want of a nurse will always know where to apply. This is an institution very much needed in all large cities, and we bespeak for it the support and co-operation of the profession.

NEW YORK POST-GRADUATE SCHOOL.—The New York Post-graduate Medical School has thus far met with gratifying success. The second term opens Jan. 8th, 1883, and continues until April 28th without intermission. It is hoped that, with its enlarged accommodations, improved facilities for instruction and increased corps of teachers it will meet with still greater success.

SUMMER SESSIONS.—The authorities of Trinity Medical College, and the Toronto School of Medicine, have decided to hold a summer session in their respective schools, and to combine the forces of the two schools in clinical instruction in the Hospital. The session will commence about the 1st of May, and continue twelve weeks. We are happy to be able to make the above announcement, and believe it will be another important step towards the advancement of medical education in Ontario.

MCGILL COLLEGE ANNUAL DINNER.—The annual dinner of the under-graduates in Medicine of McGill College, was held at the Windsor Hotel, Montreal, on the 18th ult., and was well attended. There were a large number of distinguished guests present, and a very pleasant evening was spent in toast and sentiment. The Dean, Dr. R. P. Howard, was prevented from attending by reason of recent domestic affliction, but sent the under-graduates a very kind letter, which was read by the secretary.

LECTURE ON THE "PRESERVATION OF HEALTH."—A very practical and highly appreciated lecture upon the "Preservation of Health" was delivered to the students of McMaster Hall, Toronto, on the 1st December, by H. E. Buchan, M.A., M.D.

NO THESIS REQUIRED.—The Senate of Toronto University has abolished the statute which requires candidates for the degree of M.D. to write a thesis.

PARLIAMENTARY HONORS.—Dr. McLennan, of Margaree, is a candidate for Parliamentary honors in the County of Inverness, N. S., rendered vacant by the death of Hon. Dr. Campbell. We wish the Dr. success.

CORONER—W. L. Gray, Esq., M.D., has been appointed coroner for the County of Renfrew.

Books and Pamphlets.

THE BUSY PHYSICIAN'S VISITING LIST, CLINICAL Aid and Daily Pocket Ledger. George S. Davis, Publisher, Detroit. 1882. Price, \$2.

This is a new list, but one which will undoubtedly win the favor of the profession. It is well filled with useful hints. It is adapted to any year, and when the practice is not extensive, may last for two or more years. The clinical record is a new feature, and will be found very useful.

THE PHYSICIAN'S DAY-BOOK, by C. Henri Leonard, M.D., Detroit, Mich.

This work is already well known for its neatness, compactness and convenience. It is not encumbered with any memoranda, but is a visiting list solely, and is very light to carry in the pocket.

THE MEDICAL RECORD VISITING LIST, FOR 1883.

This elegant and popular Visiting List has just been received. It contains all that is necessary in a pocket memorandum, and is most beautifully gotten up. For excellence of material and superiority of finish, it takes front rank among visiting lists. The internal arrangement of the work is all that can be desired.

THE PHYSICIAN'S VISITING LIST; ALSO THE VISITING LIST AND ACCOUNT BOOK combined, by George H. Dietz & Co., Publishers, Louisville, Ky.

This is a new aspirant for professional favor, and one that cannot fail to give satisfaction. The arrangement and convenience of the work commends it to the attention of physicians. The text is limited to those subjects of essential importance, such as notes on "poisons and their antidotes," "emergencies and their treatment," "artificial respiration," "disinfection," etc. It is elegantly and handsomely gotten up, and will be found a most excellent pocket companion. Dietz & Co. also

publish an improved Visiting List and Account-book combined, which does away with the necessity for "posting." The work is ingeniously gotten up, and is admirably adapted for the purpose intended.

WALSH'S PHYSICIANS' COMBINED CALL-BOOK AND TABLET. Seventh edition. Price \$1.50.

We have just received the new edition of Walsh's Call-book and Tablet for 1883. This list has been before the profession for several years, and is much admired for its compactness and convenience. The erasive tablet is a feature not belonging to any other physician's list and will be found very convenient for jotting down any little item which it may not be necessary to preserve. Another good feature is a column for the residence of the patient, number and street. It also contains a list of poisons and their antidotes, posological table, fee bill, directions for analysis of urine, post-mortem examinations, besides other useful information. It may be used at any time or for any year. It is an established success, and we have much pleasure in receiving a copy.

HAND-BOOK OF WATER ANALYSIS; By G. L. Austin, M.D. Boston: Lee & Shepard, publishers. Toronto: Willing & Williamson.

The object of this little monograph is to place in the hands of persons who are not professional or expert chemists, a ready method of determining water-analysis to the extent necessary to afford a correct idea as regards its wholesomeness or unwholesomeness for drinking purposes. It is well adapted for the purpose intended and will prove of service in the direction indicated.

Births, Marriages and Deaths.

In Toronto, on the 3rd of December, 1882, the wife of Dr. W. T. Stuart, of a daughter.

In Quebec, on the 7th of December, Dr. R. H. Russell, aged 63 years.

At Claremont, on the 15th of December, 1882, Dr. Wm. Milne, aged 43 years.

At Dalhousie, N. B., Samuel Shaw, Esq., M.D., in the 64th year of his age.

On the 20th of December, 1882, Dr. James A. Sinclair, of Colborne, Ont., aged 30 years.

On the 22nd December, Dr. L. E. Olivier, of St. Ferdinand, Megantic, Que., aged 34 years.

On the 29th of December, Dr. R. J. P. Morden, of London, Ont.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

A CLINIC ON INTERCOSTAL NEURALGIA; ACUTE PLEURISY WITH EFFUSION; MITRAL INSUFFICIENCY; CROUPOUS BRONCHITIS.

BY S. S. BURT, M.D., NEW YORK.

Instructor in Physical Diagnosis, N. Y. Post-Graduate School.

Thus far we have occupied ourselves in formulating the methods employed for physical examination and mapping out the chest-wall into regions, which, though artificial, are none the less convenient. We have also defined the various tissues and organs that lie either wholly or in part in these regions. The various aids to examination have been enumerated; percussion notes and the various auscultatory signs described both those that are normally found in the chest and those that are adventitious. We have also defined their positions when normal, and their significance when found out of place, and have furnished interpretations for the various adventitious signs. We shall now make a practical application of the facts that I have described. Our first patient is a man who complains of pain in the left side of his chest. Now, what causes this pain? Remember to consider the subjective, as well as the objective symptoms. The history discloses that he had a sharp pain in the left side of the chest, and that no chill accompanied it; it was also paroxysmal and of several days duration; he has had no cough and no dyspnoea. We find him anæmic and poorly nourished; pulse and temperature normal. Inspection shows that the left side of the chest does not fully expand. Palpation reveals a point of tenderness in the sixth intercostal space. There is no dulness on percussion. Auscultation reveals

some restriction of respiration more marked on the left side, and no friction sound. The absence of fever and pleuritic friction are objective signs that enable us to exclude the first stage of pleurisy. From pleurodynia or intercostal rheumatism we may distinguish this condition by the presence of a localized spot of tenderness, while an extensive area of tenderness exists in the former, and increased pain on the slightest muscular movement. Pain is augmented by pressure in rheumatism, and often relieved in intercostal neuralgia.

Angina pectoris presents a very different and characteristic history; the pain extends from the chest to the left shoulder and down the arm, and is usually of short duration. Also upon examination a cardiac lesion is frequently found accompanying this condition. For this case of intercostal neuralgia we will apply counter-irritation, and administer opiates. A combination of morphia and atropia given hypodermically is usually most efficacious. Five to ten minims of the following solution:—

R	Morphia sulphatis.....	1.	gram.
	Atropia.....	.03	"
	Acidi salicylici.....	.03	"
	Aquæ distillatæ.....	.30.	

Sig. To be used hypodermically, as directed.

Such cases of neuralgia are also benefited by cod-liver oil and quinine.

Our next patient is a man who also complains of pain in his chest. When seen by me about a week ago the pain was much more severe than now. The temperature and pulse were slightly elevated, and upon auscultation a pleuritic friction sound was heard in the right side of the chest, a diagnostic sign that might have been overlooked from the fact that there was a disinclination to take deep inspirations, had I not required him to do so. These two cases are instructive, the chief subjective symptoms being pain, while the objective symptoms are quite different. In the last instance, which is one of pleuritis, the pain has declined, dyspnoea and a slight cough remain. Let us make further examination. Inspection shows that the respiratory movement of the chest wall is nearly absent on the right side, but is increased on the left; there is no marked prominence of the intercostal spaces. Mensuration gives negative results. Palpation shows an absence of fremitus on the right side. Percussion discloses flatness in

the right infra-scapular region and right infra-axillary region, and the percussion note perceptibly higher in pitch in the right infra-clavicular region. Auscultation reveals an absence of respiration and of vocal fremitus in the region of flatness, with respiration of somewhat increased intensity on the left side. There is fluid in the right pleural cavity; the history and the symptoms help us to decide its nature. The duration has been short and without rigors or sweats, and with no increase in the temperature. By the introduction of a hypodermic needle we may obtain some of the fluid, should doubt still exist. Consolidation of the lung, which would give a decided increase of fremitus with bronchial breathing, we exclude. The diagnosis is acute pleurisy with effusion. All cases are not so clear. We will note the variations from time to time as they appear. The indications for treatment are to favor the absorption of the fluid, and to nourish the patient. An occasional saline laxative, as magnesium sulphate, a combination of potassium acetate with infusion of digitalis (grs. \times — $\frac{3}{4}$ ss.), three times a day. A dry diet as far as possible, and later, when the absorption takes place less readily, counter irritation will meet the former indication. Good food, iron and quinine and stimulants when necessary, will fulfil the later indications. Thoracentesis will not be required in this case. When the effusion is very great the operation becomes necessary. The needle of the aspirator is usually introduced in the intercostal space just below the inferior angle of the scapula. It is safer to withdraw only a small amount of the fluid at a time, yet I have drawn very large amounts from the chest without mishap; it saves the patient the annoyance of repeated operations. There is one precaution that should always be taken, and that is to strap or bind in some manner the chest wall, and administer an anodyne before the introduction of the needle, for in two instances, one in my own experience, I have known the needle to have been broken off by a violent fit of coughing, and lost in the pleural cavity. It did no injury in my case, which was one of empyema. The needle was subsequently found at the bottom of the pleural cavity, imbedded in a mass of fibrin and pus, having excited no additional inflammation.

Our third patient is this young lad who says that he has "taken cold," and that he has been coughing for several days. He has no pain anywhere,

but there is dyspnoea on exertion, and particularly severe at the present time. Examination of his chest gives no dulness on percussion, but on auscultation there is a moderate amount of sonorous breathing on both sides. The bronchitis is not extensive enough to account for the dyspnoea, and besides, it is of a longer duration than the cough. We find upon inspection that the apex beat of the heart is most distinct in the left mammillary line, beyond and below its normal position. Upon auscultation I hear a blowing murmur most distinct at the apex and in systole, an indication of mitral insufficiency. That this murmur must be always heard at the back is not true; it, however, is frequently heard there. This cardiac lesion accounts for the dyspnoea which the bronchitis has temporarily augmented. As the hypertrophy of the heart is compensatory to the mitral insufficiency we will simply caution him against over exertion and undue excitement, and direct our treatment to the bronchitis. Confinement to the house for a few days, counter-irritation of the chest with turpentine or mustard, and the administration of the following mixture will be sufficient:—

R	Tr. opii. camph.....	5.60 gram.	$\frac{3}{4}$ ss
	Ammon. carb.....	2.	" $\frac{3}{4}$ ss
	Syr. ipecac.....	2.50	" $\frac{3}{4}$ ss
	Syr. tolu.....	20.	" $\frac{3}{4}$ ss
	Mucil. acaciæ ad.....	60.	" $\frac{3}{4}$ j

Sig. A teaspoonful (diluted) every four hours.

We recognize two forms of these bronchial affections, a catarrhal and a croupous. The specimen I hold in my hand is a cast from a case of croupous bronchitis, the second and rarer variety. It is made up of coagulated fibrin and lymphoid cells. It is not uncommon for a croupous laryngitis to extend into the trachea and bronchi, but a croupous bronchitis occurring primarily in the bronchi is less common. Little seems to be known in regard to its predisposing or exciting cause. I will give you the history of this particular case.

J. B., a school-girl, twelve years of age, of American parentage, lived in good circumstances, the surroundings sanitary, and the family history was good; no laryngeal or bronchial affections being traceable. The height of the patient was four feet eight inches, the weight one hundred pounds; complexion good, tongue clean, pulse and temperature normal. The date of my examination was nearly two years from the beginning

of the attack, and just previous to the expulsion of one of the casts.

In August, 1876, the patient suddenly, without any premonitory symptoms except a slight sense of suffocation, coughed up a whitish mass slightly tinged with blood. When placed in water it assumed the present shape. Little disturbance followed the expulsion, the child going about as usual. At irregular intervals varying from once a day, to once in five days and two weeks, she coughed up these casts with slight effort and no pain. There was no intervening cough; the exudation was thrown off usually in the early morning, sometimes at night, seldom in the daytime. This continued for nearly three years. The treatment was mainly expectant. Her general condition remained good otherwise, and now for several years she has been free from cough. Physical examination of the chest: Inspection—normal. Percussion—no abnormal dulness. Auscultation—respiratory murmur of somewhat diminished intensity at the upper part of the left lung, with what I should describe as a rustling or indistinct sonorous breathing over the left bronchus behind. No abnormal respiration elsewhere.

ON THE POSSIBILITY OF THE LUNGS RETURNING TO THE STATE OF ATELECTASIS.

BY JOSEPH WORKMAN, M.D., TORONTO.

(Translated from Rivista Sperimentale).

Tamassia, on this subject, having related his own experiments, sums up his views in the following conclusions:—

1. The doctrine of English Jurisprudence, which recognizes no necessary relation between life and respiration, proves nothing either for, or against, the hypothesis that the lungs when once distended by respiration, may spontaneously return to the atelectic state.

2. The cases cited by English writers against the diagnostic value of the pulmonic hydrostatic test, relate, in the majority, not to the phenomena of true respiration, but to organic reaction of the tissues.

3. Minute examination of the cases given by Thomas, Lieman, Schröder, Hecker and Herman, in which it might seem that spontaneous return of

the lungs to atelectasis may occur, shows that in some of them there had been no true respiration, but merely a sonorous vibration of air in the fauces, and in others, that the test had not been executed with all the necessary precautions.

4. The confusion which has arisen between the idea of atelectasis in the medico-forensic sense and the clinical, (the former being that of utter absence of air), has had no small part in giving support to the theory of Schröder, *i. e.*, spontaneous return to atelectasis.

5. In all the cases adduced by Schröder and others, the subjects were either infants immature or very feeble, which had perished by slow death quite different from that of infanticide.

6. Direct experiment on the lungs of rabbits, dogs, etc., which had just begun to breathe, showed that in no case, when the lungs were left to themselves, did they spontaneously lose so much air as to sink to the bottom when immersed in water.

7. Direct experiment on the lungs of rabbits, dogs or men, who had breathed for some minutes, hours, or years, and had been suffocated, showed that in order to deprive the lungs of floating capacity, an enormous pressure is needed.

8. Lungs but a little distended by respiration or congested, or insufflated, require less pressure to deprive them of floating power than normal lungs do.

9. Decrepid age being excluded, it may be held that the more advanced is the age of the individual, the stronger will be the resistance of the lungs against sinking under pressure, and losing the air contained in them.

10. Slowness in dying lessens the resisting power of the lungs.

11. This resistance is notably diminished by the inception of putrefaction.

12. The theory of Schröder has therefore no positive basis, and whenever the hydrostatic test and the other examinations completing it, show that there has been no air at all in the lungs, we may, with perfect security, infer that the infant had never breathed.

—••—
 VENESECTION RESUSCITATED. — Dr. Fordyce Barker says he is gradually getting to bleed more frequently. He thinks it has been too much neglected in practice, and would now adopt it in some cases of abortion, and puerperal convulsions, renal congestions, with coma, convulsions, etc.

ON THE DIAGNOSIS AND TREATMENT OF NASAL POLYPI.

BY G. S. RYERSON, M.D., L.R.C.P.S., ED.*

Lecturer on the Eye, Ear and Throat, in Trinity Medical College, and Surgeon for Eye, Ear and Throat Diseases, to the General Hospital and Hospital for Sick Children, Toronto.

MR. PRESIDENT AND GENTLEMEN,—I do not propose to occupy your valuable time with a long dissertation on the pathology and clinical history of nasal polypi, but would wish to draw your attention to one or two points in the diagnosis and treatment of these growths which are of considerable practical interest.

First—As to diagnosis—the disease with which polypus is most frequently confounded is hypertrophy of the mucous membrane over the turbinated bones and septum. It can be easily differentiated from this by examining the nose carefully with a probe, laryngoscope, and nasal speculum. I may remark here that the practitioner should be provided with two kinds of nasal speculi; Bosworth's, for noses which are more or less *retroussé* answers admirably, but will be found of little use in long or overhanging noses; for such, a simple hard rubber conical speculum is best suited.

When the nasal cavity has been well illuminated you will notice in hypertrophy of the mucous membrane that the color is whiter, that there is no translucency, and that there are no folds and depressions as in the case of polypi. There is frequently also thickening of the septum, on one or both sides, a condition, but rarely associated with polypus. It is also very unusual to find a polypus springing from the septum. The subjective sensations are not very reliable for diagnostic purposes, as in both cases they are those of obstruction to nasal breathing. With the probe, in the case of polypus, one can lift them and determine their points of attachment. One should never attempt to remove these growths without carefully determining this point, and without thorough illumination, otherwise it is a mere groping in the dark, unsatisfactory alike to physician and patient.

With regard to treatment, I look upon removal with the snare as the only satisfactory mode of dealing with polypus. It is comparatively painless and almost bloodless. Several polypi can be

removed at a sitting, with very little loss of blood, and moreover, the view is not obscured by blood and clots. It is not always an easy matter to slip the noose over the growths, and valuable assistance may be had from the two little instruments I show—the first, which is simply a director with a bifurcating point, will be found of assistance in passing the wire around large growths. The little hook, the shaft of which is bent at nearly a right-angle, is useful in pulling them through the loops when it is placed in position over the tumor. Nasal polypi are exceedingly liable to recur. This recurrence I believe to be best combatted by touching the stumps with glacial acetic acid on a cotton holder—the pain it causes can be instantly stopped by spraying with this solution:—

R Acid Carbolic gr. i., sod. bibor. sod. bicarb, aa. grs. ii., glycerine ʒi., aq ʒj. Patients also experience much benefit from the use for some time after of this powder:—

R Pulv. potas. chlor. ʒii.

Pulv. zinci sulph. grs. xx.

Pulv. acid boracis. ʒii.—M

Sig.—Put a teaspoonful in a teacupful of water, and either draw in through the nose every morning, or use with the syringe or post-nasal douche.

Correspondence.

SEMPER PARATUS.

To the Editor of the CANADA LANCET.

SIR,—I am thoroughly convinced that the majority of country physicians will agree with me, when I affirm that in many instances we have not at our command, in emergencies, medicines and appliances upon which we can place reliance for the amelioration of the condition of our patients. In some cases the friends are compelled to travel many miles to get an instrument or medicine, where if a little forethought were exercised, not only this unnecessary travel could be obviated, but the suffering of the patient lessened—a great consideration. Not long since I was called to an arm and shoulder presentation, and finding it impossible to turn, I decided to use the blunt hook; but such I had not with me, consequently had to despatch a messenger to a medical friend, to come and bring his instruments. He came—minus the hook, so sent again; the hook came and the woman was

*Read before the Canada Medical Association, Sept., 1882.

soon delivered. The child was fortunately dead ; it had spina bifida, club feet and a monstrous head. Four hours of pain and mental anguish might have been spared the woman and I and the attendants relieved from anxiety—all the result of not having with me an instrument that would not cost over \$2. This was my first experience with the hook, although in practice nearly fifteen years. For nearly ten years I carried with me the instrument; but never having a case in which to use it, it was placed aside and lost, and of late years I never thought of its necessity. I had seen its use and was delighted with it, and within two hours after my arrival home I had one made by a blacksmith in the village. I mention this fact to show the high opinion I had formed of the utility of the instrument and to state that any intelligent blacksmith can make one. Do not be startled at my revelations when I tell you that, two days afterwards, I received a telegram from a person living sixteen miles north of this place, but did not go until messengers came for me. It was also a shoulder presentation. The attending physician was exhausted with his task and the woman could not have survived long. The doctor's message was, "For God's sake, come" I went cheerfully, thank heaven,—although I have, so to speak, been spat in the face for many years through man's ingratitude. I am "always ready" to assist a woman in her misery ; however poor she is, the greater claim has she on my services. I did not regret my going ; the trembling grasp of the attendant's hand repaid me at my approach to the miserable cabin. Before I had warmed myself, I handed the doctor the hook, and luckily for the woman, she was delivered in a few minutes afterwards. In this case, as in the former, the perineum was lacerated to the sphincter ani, and was attended to at once. In the former, the accident was not noticed at the time.

Considering the number of years I have been in practice and having a first-class midwifery business, wherein I have often flattered myself at my success, I must confess that my eyes were opened to the necessity of being—to use the language of my text—semper paratus, when two such cases had broken so suddenly on me. Now for my third case, which I attended a few days after the last mentioned. It is useless to enter into the ordinary particulars ; suffice it to say, that I found the short forceps impossible to adjust, and as a result—luckily for the

sufferer—had to send only two miles for the long ones ; and for the third time, consecutively, another lacerated perineum. The question arises, on whom, when, and where, is the next stitching to be done ? I hope, quoth the raven, *nevermore !*

I am now thoroughly equipped with a fine set of obstetrical instruments, purchased from a Toronto firm, Stevens & Son, and in addition I carry a syringe, lancet, chloroform, ergot, liq. ferri perchlor., the alum egg, etc., in this obstetrical bag, so that they may not be used in other cases than those for which they are intended and save trouble in collecting them together when hurried. To make a resumé of my observations, I will divide them under the following headings :—

1st. Do not trust your abilities without the aid of every medicine, appliance and instrument, when called to a case of labor.

2nd. When thus equipped, your anxiety is relieved to a great extent, and your reputation not liable to be endangered.

3rd. Of still greater consideration, is the timely alleviation of the sufferings of one who has placed the most trying agony of her life in your hands. To you, alone, her every thought is directed ; so, be ever prepared for an emergency.

This article was written, not because of any cacoethes scribendi the writer has, but for the good of the fraternity at large ; for it cannot be denied that, among the 1700 doctors of medicine in Ontario, there are many who might profit by the above experience. "It is human to err," is admitted, but to knowingly walk in the ditch the second time is inexcusable ; so this article is intended to thwart the first unlucky step you may make.

SYNTAX.

Jan. 11th, 1883.

NASO ORAL RESPIRATORS.

To the Editor of the CANADA LANCET.

SIR,—I notice in your last issue of the LANCET the communication of Mr. J. L. Mills, of Brantford, in defence of the high price of the above little instrument. He says I probably forget that he has to pay 25% upon goods of this description coming from Great Britain. I do not forget this fact, but remember in connection with it, that we have other articles from the same place, far more difficult to

manufacture and much more expensive in their finish, at less cost. However, I did not accuse Mr. Mills of the extortion. Permit me, however, to defend my Kingston druggist from any attempt at overcharge—he gave it to me for what it cost him, but says Mr. Mills told him the retail price was \$4. or \$3 per doz.

Yours truly,

MEDICUS.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

October 5th, 1882.

The President, Dr. George Wright, in the chair. Dr. Spencer showed a woman with an eruption, probably syphilitic, chiefly on the face, neck, and forearms. Treatment had not been followed by much benefit. Dr. Cameron advised giving iodide of potassium in much larger doses than had been given.

Dr. A. H. Wright showed fractured os innominatum and spine.

The specimens were from a young girl, who had fallen from a window to the ground a distance of 15 feet. She probably fell on her feet and then backwards to the ground. On admission to the General Hospital shortly after the accident, she was paralyzed in the lower extremities and movement caused great pain. Examination discovered fracture of the ramus of the pubes, and it was thought of the crest of the ilium. There was a sanious discharge from the vagina; later it became purulent and offensive. Her bowels were not moved during 16 days subsequent to admission, though purgatives were fully given, but when once their action was re-established the evacuations became very frequent. She died 28 days after admission.

A *post mortem* examination was made a few hours after death. The left os innominatum was broken into seven pieces, a small piece was broken out of the bottom of the cotyloid cavity and fractures extended from that cavity across the iliac and ischiatic portions of the bone. The arches of the eleventh and twelfth dorsal vertebræ were broken off from the bodies. The spinal cord was much disintegrated.

Dr. Nevitt showed an exostosis removed from the ungual phalanx of the great toe of a young girl.

Dr. Macdonald reported a case of epithelioma of the uterus and vagina in a woman, a farmer's wife, aged 60. Symptoms first showed themselves last April in a bloody vaginal discharge, lasting for a day or two, and recurring from time to time.

No pain or hydrorrhœa. He removed as much as possible from the growths, to mitigate symptoms and prolong life.

Dr. Nevitt said he had a similar case at present under his care. He was applying the fuming nitric acid, much to the relief of the patient. Both pain and hydrorrhœa were marked.

October 19th, 1882.

The President, Dr. George Wright in the chair. Dr. Holmes was elected a member of the Society.

Dr. Reeve exhibited a patient illustrating the treatment of Ectropion by transplantation of flap without pedicle, and gave an elaborate description of the various steps of the operation. The case was a marked example of cicatricial keloid resulting from a burn. The upper lid had been treated by transplantation two years ago with a satisfactory result. The operation on the present occasion was for the restoration of the lower lid. The extent of raw surface made was 25×15 mm., and flap 65×40 mm. was transplanted from the inner side of the arm. The operation was performed three weeks ago, and the flap had united perfectly. This was the fifth case operated on by Dr. Reeve, of which four were completely successful. In answer to Dr. Cameron, Dr. Reeve, said he had not tried treatment of keloid by friction with sand; that the mode of operating by transplantation without pedicle was that developed by Wolfe, of Glasgow; and that no keloid had formed on the arm as a result of the removal of the flap.

Dr. Zimmerman reported a case of malignant disease in a compositor. He had had pain, nausea, and vomiting, for the last six years; the pain was located chiefly in the umbilical region. He had contracted the opium habit from taking medicine freely for the pain and required very large quantities to give him relief. In April last he had symptoms of lead colic. In August he had intestinal hemorrhage which recurred on several occasions subsequently. There was the cachectic appearance but no bronzing of the skin. The stools gave no indication of stricture.

On *post mortem* examination a cancerous mass was found occupying the hollow of the sacrum involving the rectum and sigmoid flexure but not lessening their calibre to any considerable degree. The left supra-renal capsule was wholly involved in scirrhus growth; the right one was healthy.

Dr. Zimmerman said the disease was rare in the supra-renal capsules, especially in one alone, and it would be interesting to know if the capsule had been primarily diseased in this case. In reply to Dr. Cameron, he said the frequency of malignant disease of the pelvic tissues in young people might be due to great activity of the sympathetic.

Dr. Graham reported a case of abscess of the tongue. It was the first case he had seen. Drs. Workman and Machell had seen cases.

Dr. Graham reported a case of a child, aged three years, with symptoms resembling those of leucocythemia. Splenic dulness was increased; the red corpuscles about $\frac{2}{3}$ normal number; and white corpuscles in proportion of 1 to 20 red ones. No history of ague. The case might be anæmia, with splenic and glandular enlargements. Dr. Cameron said he saw one exactly similar two months ago.

Dr. Graham reported a case exhibiting symptoms of bulbar anæmia in a man aged 48. The man had for years devoted himself closely to business, and suffered from debility in consequence. He went to Europe last spring, and on the voyage was seized with an attack of dyspnoea; another in London. On Oct. 5th Dr. Graham was called hurriedly at night to see him. He had awakened with another attack. In this there were a number of superficial respirations, followed by a deep one. No chest symptoms. Next day, while receiving application to the throat, was again seized. No spasm of vocal cords during this seizure. Memory is failing; he has become very emotional; is very temperate; no venereal history; urine normal; no optic neuritis.

Dr. Cameron inclined to the view that tumour of the brain was the cause. Such symptoms might arise from a form of epilepsy.

Dr. Reeve said the absence of optic neuritis did not exclude tumour of the brain, as tumour may exist for years and neuritis only develop a short time before death.

Dr. Graham exhibited pulse tracings from a case of aortic regurgitant disease in a fish pedlar. No symptoms till two weeks ago. He was passed a short time ago for life insurance. He believed the case to be idiopathic endocarditis.

Dr. McPhedran reported a case of hemiplegia in a man aged 28, due apparently to embolism. The heart is normal; no history of inflammatory rheumatism or syphilis.

Dr. Graham then read a paper on Lupus, giving the history of six cases, illustrating the different varieties. He believed *L. Erythematosus* and *L. Vulgaris* to be similar in pathological character, the difference being due to the seat of deposit. Prognosis always bad.

Dr. Cameron adopted the view of Friedlander that the two forms of Lupus are distinct pathologically. He advised treatment by oblique linear scarification or erosion, to cut off the blood supply, followed by application of iodoform and pressure.

Dr. Workman brought to the notice of the Society the desirability of establishing a registry of nurses of Toronto.

ONTARIO BOARD OF HEALTH.

The third quarterly meeting of the Provincial Board of Health was held during the early part of December. Present:—Dr. Oldright (in the chair), Covernton, Cassidy, Rae, Yeomans, Bryce, (Secretary) Prof. Galbraith.

The Board went into committee of the whole to consider the Legislative Committee's report, which made the following recommendations:—That such legislation be applied for as will compel the local Board of Health in any city, town, incorporated village or township in Ontario, to appoint one or more health officers. Instead of municipalities, who shall perform such duties as may from time to time be assigned to him by such local Board of Health: the Board of Health shall appoint a health officer who shall be executive officer of the Board: such health officer shall wherever practicable be a medical man, he shall report to the Provincial Board diseases prevalent and work performed generally. It shall be lawful for two or more adjoining municipalities to appoint the same person as health officer. For the prevention of persons having infectious diseases from using public conveyances: scarlet fever, smallpox, diphtheria, measles, and whooping-cough be considered as infectious diseases; that no person shall sell or dispose of bedding, clothing, or other articles likely to convey any of the above diseases or typhoid fever, that an owner or person having charge of a conveyance must not after the entering of any person infected with any of the above-named diseases into his conveyance, allow any other person to enter it without having first sufficiently disinfected it; that no person shall rent, let, or hire a house or room which has been recently occupied by any person having any of the above-mentioned diseases, before the house shall have been sufficiently disinfected under the direction of the local health authorities: that the following addition be made to the Public Health Act of 1882:—"Every municipality may provide a portable or other furnace for the disinfection of clothing and other articles, as well as such disinfecting appliances as may be admitted necessary, and may charge persons who are subject to pay such fees as may be found necessary to defray the expenses thereof. That the Act entitled "An Act respecting vaccination" be extended to towns, incorporated villages, and townships, instead of being only applicable to cities, as it is at present.

The further consideration of the subject of legislative amendments was taken up on the second day, which were as follows:—

That the Chairman of the Provincial Board of Health shall be appointed by the Lieutenant-Governor in Council, and the services of the other members of the Board, except the Secretary, shall be

honorary except when engaged in attendance upon the meetings of the Board or any of its Committees, when they shall be allowed such *per diem* as shall from time to time be determined and their travelling and other necessary expenses when so occupied; that the Act of 1882 be amended as follows:—The Lieutenant-Governor in Council may appoint a competent and suitable person as Secretary of the Board, who shall hold office during pleasure and who shall be the chief health officer of the Province; that such legislation be adopted as shall give the local Boards of Health the power of ordering an examination to be made of the water or waters used by any of the inhabitants for their respective municipalities and of regulating the construction and cleansing of wells, and for closing wells or other sources of water supply the water of which shall be found unfit for use; that the Registration Act be amended by the addition of the following clause:—"The public carrier or other persons shall not remove the dead bodies out of any municipality without first having obtained a certificate from the Divisional Registrar that the particulars relating to the death of such persons have been duly registered with him under the provisions of said Act, and said certificate shall be known as a transient burial permit." The above clauses of the report was adopted.

It was moved that a committee consisting of Dr. Oldright and Prof. Galbraith be authorized to issue a circular to Municipal Councils and local Boards of Health setting forth the evils of the privy-pit and cess-pool systems, and endeavouring to induce them to adopt such systems of disposal of sewage as shall be best adapted to the preservation of health and the circumstances of their respective municipalities, and explaining these various methods.

It was stated that a number of cases of remittent and intermittent fever at Madoc and Wingham were attributed to the unsanitary conditions which prevailed in the vicinity of these places caused by the overflow of certain dams. It was decided that the Board of Health represent the matter to the Provincial Secretary, that it might be remedied according to the Public Works Act.

DR. COVERNTON read an interesting report of his visit to England, and his inspection of the system of the Health Boards there. The report stated that during the five years preceding the introduction of an Act in England regarding infectious diseases, which provided for disinfection and isolation, the annual average of deaths from contagious diseases was as follows:—Scarlet fever, 92; smallpox, 55; measles, 50; typhus, 29; enteric or typhoid fever, 36. During the five years following the introduction of the Act the number of deaths from these diseases was reduced to the following annual average:—Scarlet fever, 64; Smallpox, 28; measles, 22; typhus, 12; and typhoid to 19. The effect of the introduction of the Act was a reduction of eleven deaths per thousand inhabitants.

The Secretary, Dr. Bryce, read the report of the Special Committee appointed to visit the Boards of Health of Boston, New York, and Albany to inquire into the details of the modes of working of Boards of Health at those places.

Dr. CASSIDY read the concluding part of the report of his recent investigation into the outbreak of typhoid fever at Stratford in the form of a letter which he had forwarded to the Chairman of the Board of Health at that place. After explaining that the fever had been contracted by impure water, which contained sewage matter he made the following suggestions:—"That pure water be obtained for drinking purposes: that until it can be obtained the water used for drinking purposes be boiled and filtered; that privy pits and cesspools be discarded for the earth closet or some similar inexpensive plan; that house drains be properly trapped and ventilated." The report was adopted.

In the evening session the report of the Convention at St. Thomas was read and adopted; also Dr. Covernton's report of the International Congress at Geneva was received.

A report of the outbreak of Enteric Fever at Lambton Mills was read. The probabilities with regard to the spread of the epidemic are that it was caused by infected linen thrown from the houses, and that the presence of a slaughter-house in rear of the houses where the disease broke out, contributed to give to the fever a malignant and fatal character.

It was moved by Dr. Cassidy, seconded by Dr. Covernton, that "Whereas typhoid fever and scarlet fever have been clearly traced, both in Europe and America, to the adulteration of the milk with water contaminated with sewage, and in other instances to the washing of the milk cans with water similarly contaminated, and the direct absorption of germs by the milk, and where other diseases such as milk sickness and *ulcerative stomatitis* have been traced to the use of milk from cows infected either with milk sickness or foot and mouth disease, this Board would recommend the local boards of health that a proper inspection of dairies should be made in order to prevent the occurrence or continuation of such evils."—Carried.

Selected Articles.

CHRONIC ALCOHOLISM.

Its Pathological Aspects.—Excerpts from an article by G. K. Sabine, M. D., in Boston Medical and Surgical Journal:

Changes in the Skin: In the early stages of this affection the skin is remarkably smooth and soft, owing to an increase in the fatty tissue. Later on the skin becomes dry and on the extremities hard and inelastic.

The Blood: The most striking change in the

blood is an increase in the watery elements, and diminution of the fibrine. It contains much serum, forms no or only very small coagula, and is of a very dark color. Another peculiarity presented by the blood is the increase of fat.

Fatty Tissue: There is a marked increase in the subcutaneous fat, in the fat between the muscles about the different organs, especially heart, kidneys, intestine, in the greater and lesser omenta, in the mesentery, etc. In the latter stages of alcoholism, when the digestion becomes impaired and the blood deteriorated, this accumulation of fat disappears. According to Rokitsansky there is an increase of fat in the marrow of the bones, the bony tissue at the same time being atrophied.

The Stomach and Intestine: A Chronic Catarrhal condition of the stomach is quite constant, and appears early in the disease. This is indicated by abundant soft gray mucus, projections of the mucous membrane, and by the slaty color that occurs, especially near the pylorus. Owing to the disturbance of circulation which takes place later in other organs the return of the blood from the stomach is interfered with so that a varicose condition of some of the veins is produced. The hypertrophy is very apt to be accompanied by dilatation of the glands, due to compression at their outlet, so that small cysts which are filled with a clear fluid and project from the surface result. The continued irritation of the diseased mucous membrane is productive of a variety of ulcerations from the small hemorrhagic erosion, characterized by a superficial loss of substance, to the so-called round or perforating ulcer.

The Liver: The liver is the first and most severely affected by the abuse of alcohol of any organ in the body. The alcohol being taken up by the portal system is carried directly to this organ and there, by its irritating effect, produces various disorders according to the individual's condition, and more especially the character of the alcohol. The more concentrated the alcohol the sooner and the more severely is the liver affected. Among the causes of fatty liver the abuse of alcohol is one of the most prominent. It is probable the alcohol acts by retarding the metamorphosis of tissue, and the blood being overcharged with fat deposits it rests in this organ.

Interstitial Hepatitis—Cirrhosis of the Liver: The most common cause of this form of interstitial hepatitis, which extends uniformly over the whole organ, is usually considered to be the intemperate use of alcohol—still this is not necessary; most drunkards do not have a cirrhotic, but a fatty liver, and many persons with cirrhosis are not in the habit of dram-drinking.

Organs of Respiration: Drunkards are very subject to catarrh of the larynx, which is often accompanied by a similar condition of the pharynx. This catarrhal inflammation of the larynx not unfre-

quently extends into the bronchi. A very important question is whether the habitual use of alcohol predisposes to disease of the lungs.

The Heart: In habitual drunkards the heart is almost always found hypertrophied. This hypertrophy may be brought about in many ways. As is well known, the effect and force of alcohol is to increase the frequency and force of the pulse. When a muscle is called upon to do an extra amount of work the effect is to increase the size of that muscle.

The Vessels: The change in the capillaries consists in an increase in their lumen, that of the smaller and larger arteries in the so-called atheromatous degeneration. The dilatation of the small vessels and hyperemia of all the organs have been explained on the ground that alcohol has a paralyzing effect upon the vaso-motor system; also, that the alcohol by its irritating effect upon the walls of the vessels, causes a fatty degeneration of the same, and as a consequence a loss of tonicity.

Affections of the Urinary Organs: After each ingestion of alcohol the secretion of urine is increased as a large quantity of water is excreted with it. The diseases of the kidneys which most frequently occur in drunkards, and especially in the latter stages of alcoholism, are the parenchymatous and interstitial or granular nephritis. This latter is divided into two stages, that of infiltration of cellular elements, and the other of connective tissue formation. At first the inflammatory process produces an active hyperemia, with an exudation of fluid and white blood corpuscles into the interstitial connective tissue. This in turn is productive of anemia, impaired nutrition of the renal epithelium, and granular degeneration of the same.

The Nervous System: The affections of the nervous system in drunkards are both numerous and important. No organ, with exception, perhaps, of the liver, suffers so constantly and from such a variety of lesions as the central nervous system. Many alterations in the functions are recognizable after death by a change in the tissues, but there are various affections on the other hand, which point to a marked change in the cerebro-spinal system that cannot be detected.

The Brain: The calvarium is altered. It is increased in weight by hyperostosis and sclerosis, both the outer and inner table being thickened. The cancellated structure is more dense, owing to a concentric formation of bone about the Haversian canals. Upon the inner surface the channels of the vessels are deeper than normal as well as the depressions for the Pacchionian bodies. There is an increase in the amount of blood in the brain owing to the abnormal action of the heart and fatty or an atheromatous degeneration of the walls of the small vessels, or diminished nutrition of the same, which paralyzes them so that their lumen becomes increased and hyperemia results.

Cerebral Apoplexy: An effusion of blood into the brain substance frequently occurs in drunkards. All conditions brought about by the intemperate use of alcohol which tend to produce cerebral hyperemia favor, in a marked degree, the occurrence of either large or capillary effusions.

Serous Apoplexy: An acute or chronic serous effusion into the cavity of the skull, into the brain substance, or into the membranes of the brain, and into the cavity of the arachnoid, may result from the abuse of alcohol. In alcoholism the blood is poor in plastic material, and as a consequence the transudation is favored. Either an acute or chronic collection of fluid in the ventricles of the brain is not an infrequent result of drunkenness.

Pachymeningitis Interna Chronica: This inflammation of the inner surface of the dura mater consists at first of a very slight layer of fibrine on the surface of the dura, from which a thin layer of connective tissue is afterward developed, which adheres to the surface of the membrane. A second and third layer of inflammatory exudation is then formed, and so on until there are many layers. The dura mater thus becomes materially thickened. Each one of these layers is vascular, and occasionally one of these vessels ruptures, resulting in a hemorrhage between two of the layers.—*Louisville Med. News.*

CANCER OF THE STOMACH.

(Clinic by DR. PEPPER OF Philadelphia.)

I had until recently under my care a lady of about middle age, suffering from tinnitus in the left ear, evidently depending upon some subacute inflammatory change in the middle ear. At times, it seemed to threaten development into Menière's disease, *i. e.*, attacks of vertigo associated with tinnitus, but I cannot say that it ever fully assumed this character. She appeared to be benefited by a course of treatment which consisted in careful attention to hygiene and diet, the prolonged use of quinia with iodide of potassium and counter-irritation over the mastoid process and the nape of the neck.

Last spring, while feeling unusually well, she began to complain of a great deal of gastric distress. This was most marked after eating. It appeared to be relieved by a prescription containing pepsin, and the omission of all other remedies, but it soon returned. There was never any vomiting. Examination of the abdomen showed tenderness, but no thickening or hardening could be detected. She came of a healthy family, her mother living to the age of 82, and as far as could be discovered, no member of the family had suffered from malignant disease. There has been no sufficient cause to explain the development of gastric pain; and I have therefore, for a time, hoped that it might

prove to be a case of gastralgia, which her anæmic condition rendered not improbable. I had, however, observed that it differed from a gastralgia in two particulars. In the first place the taking of food, instead of affording relief, increased the distress. In simple neuralgia of the stomach, we generally find that the ingestion of food relieves the pain, which again appears as the stomach becomes empty. In the second place, the pain was constant, instead of being paroxysmal, as is usual in gastralgia. I therefore suspected the existence of a gastric ulcer. There was, however, no vomiting, the amount of tenderness was not extreme and the occurrence of simple gastric ulcer in a woman whose surroundings were favorable, who had good food, and who was free from all care, is unusual. * - *

As the spring went on, finding my attempts to relieve this pain were unsuccessful, I put the patient to bed and gave her an exclusive diet of milk, in small quantities at short intervals. I also gave her alteratives, such as bismuth, nitrate of silver, minute doses of carboic acid, with soda, valerianate of zinc and various other preparations, hoping to relieve the gastric distress; but nothing afforded relief, and she became thinner and thinner. About the middle of June I went away, leaving her under the care of Dr. James Tyson and Dr. Judson Daland. When I returned I found that she had died, and that an autopsy had been held, and that the specimen now before you had been removed.

I propose to examine this with you to-day. The case, as you will have inferred, proved to be one of malignant disease of the stomach. On examining the stomach, I find a number of ovoid masses. I wet one of these and it presents the appearance of a round-cell sarcoma, but a naked eye is not sufficient to decide this point. It is, however, some form of neoplasm. I may as well say here that you will often be struck, no doubt, with the laxity with which I use the terms sarcoma and carcinoma in my clinical lectures. The truth is, the difference between these growths and their minute subdivisions, as they affect internal organs, is a matter of far greater consequence to you as microscopists and pathologists, than it is to you as physician. You have a patient in whom the symptoms and the progress of the case show conclusively that some neoplasm has developed in the stomach. The growth is going to kill the patient. The question whether it is an epithelioma, a cylindroma, a carcinoma, or a sarcoma, while of interest in the subsequent microscopical examination, does not alter the prognosis or influence the treatment. I do not use these terms in this manner because I disregard the importance of the study of these minute distinctions between the different forms of tumors; for these distinctions are of extreme importance when we come to consider tumors involving the superficial parts where they are open to

digital examination and operative interference. There we have a different history as regards recurrence after operation, as regards the tendency to extend to adjacent parts, and as regards the formation of secondary multiple growths. A consideration of the minute anatomy is of great importance in external tumors, but in the case of neoplasms affecting internal organs, as the liver and stomach, the same importance does not attach to these minute differences, nor are we able to make them. As I have said, there is hypertrophy of the glands lying in the curvature of the stomach. This enlargement of the glands extends downward, involving the glands around the aorta and along the spinal column. On section they all present the same general characteristics. They are grayish yellow, sometimes of a pinkish tinge, fleshy, without much juice on scraping, and evidently the seat of some neoplasm. The stomach itself has undergone remarkable changes. It is exceedingly small, and looks like a contracted, old, diseased, urinary bladder. If filled to its utmost capacity, it would not contain four fluid ounces. The inner surface is discolored and presents a worm eaten, trabeculated appearance. The walls are thick and rigid. On section they are found to be extensively diseased and the seat of malignant infiltration. There is fusion of the coats of the organ, particularly of the peritoneal, sub-peritoneal and muscular tunics, the mucous coat being less affected than the others. The external and middle tunics are fused into a hard, glistly mass, not less than one-third of an inch in thickness. There is not as much hypertrophy of the muscular layer as we often find, especially in cases where there has been pyloric obstruction. In the present instance the pyloric orifice is not at all obstructed. It is sufficiently large to admit the thumb. As I have said, the mucous membrane is much less involved than the external coats. There is no ulceration of the stomach, and no fungous mass projecting into the organ. This is a remarkable case, and the appearances presented are very unusual.

You see how they account for the symptoms described. There was no pyloric obstruction, and there was, therefore, no vomiting. Vomiting, in cancer of the stomach, occurs most commonly as the result of the attempt of the organ to propel its contents through an obstructed pylorus. This is the reason why the vomiting presents the peculiarities of coming on a certain interval after the ingestion of food, of occurring when the food has reached a certain stage of digestion, and of being followed by complete relief. In other cases of gastric cancer, there is an ulcerated, irritable surface, and the contact of the food against this surface excites vomiting. In such case, the vomiting resembles that which ordinarily occurs in simple gastric ulcer. There was here neither pyloric obstruction nor ulceration of the mucous membrane. Again, I never

was able to feel any lumps or hardening in the epigastrium, on the most careful palpation. The stomach was so contracted that it must have been far back and above the margin of the ribs. Towards the very close of the case, Dr. Tyson thought that he could detect a tumor. This is often the case. While during the earlier periods, and on towards the close, no tumor can be felt, yet, when the patient emaciates to the last degree, and you are able to press your fingers against the spinal column, you may then find a tumor; but in some cases where the glands were not much enlarged, I have felt until the day of death, and have been unable to discover any tumor in the epigastrium.

When you come to study closely the diagnosis between cancer of the stomach, simple ulcer of the stomach, and chronic catarrhal inflammation of the stomach, you will find that there may be in all of these, pain, progressive wasting and anæmia, and you turn to the question whether there is vomiting of such character as to indicate mechanical obstruction or ulceration, and whether a careful examination reveals hardening, thickening or a definite tumor, in order to establish the diagnosis. If in the present instance you had depended on these points, the diagnosis would have been simple ulcer, or chronic catarrh. You can easily see, from this specimen, that in a certain proportion of cases you will have to base the diagnosis upon the age of the patient and the steadily progressive, downward course, despite hygiene, dietetic regimen and judicious therapeutics. You do those things which, if it were a case of simple ulcer or of chronic catarrh, would be beneficial, yet you obtain no improvement, or, at the most, but a slight effect. The therapeutic test in connection with the steady march of the case and the age of the patient, will in some cases constitute the sole basis of the diagnosis between malignant disease and simple ulcer and chronic catarrh.—*Med. and Surg. Reporter.*

UNUSUAL AND COMPLICATED CASE OF INGUINAL HERNIA.

BY JOSEPH BELL, F. R. C. S. ED.

A. B. æt. 26, admitted Oct. 5th, a powerful, active, and very muscular policeman, amused himself by leaping over a bar, on coming down discovered that he had strained himself, and found a painful, very tense tumour, as large as a large orange, but ovoid and flattened, in his left groin. This was at once followed by urgent vomiting, intense pain at umbilicus, and great prostration. I arrived within *four hours* of the occurrence of the hernia. Dr. Blaikie noticed that there was only one testicle present in the scrotum, and on inquiry was told that the other had never been down but could be felt at times in the groin. Having given

chloroform and shaved the parts, I made a free incision along the long axis of the tumour, and found an exceedingly thin, transparent sac, tensely filled, and containing a teaspoonful of transparent serum. On opening the sac at its upper surface, about 18 inches of bowel were seen, of a very dark colour, and full of serum, but retaining lustre, polish and tension. In addition to this, a large piece of omentum was also in the sac, swollen, engorged, but non-adherent, lying like an apron over the upper half of the coil; and behind the bowel was the testicle not larger than a small walnut. The cord was also exceedingly thick and full of serum. The external inguinal ring was fairly open and easily dilatable, not requiring division; and at first it seemed as if the bowel was to be easily emptied and returned to the abdomen, as with gentle pressure nearly the whole coil at once retired from view. It was obvious, however, that it was not relieved, and that it only was returned into a largely dilated and broad inguinal canal; so I again pulled the coil fairly out, making traction on its neck which was very tightly held. I then raised the piece of omentum, which unfolded to quite the size of the palm of the hand, and, gently pulling upon it, found that it was also tightly held, and at the constriction was already black in colour, and apparently dead. Pulling the testicle also down, we found the cord also held as in a vice. The constricting point was the internal ring; and the canal being of its full normal length, this could barely be reached by the tip of my forefinger, and the tip could not be got through it.

With care, however, I guided a long, curved, probe-pointed bistoury on the point of my finger, and with great caution nicked the ring upwards till the finger could be got through it, and then, feeling no pulsation, and guiding the knife, divided it freely. This being safely accomplished, it was then easy enough to empty the bowel of flatus and gradually reduce the coils into the abdomen. The question then arose what to do with the omentum. It was difficult to believe that such a large piece could have been driven at once through such a small aperture; but there it was, and the restriction was so tight that it was almost certain to die, or at least to suppurate. So I ligatured it with thick catgut in four positions, and divided each separately, leaving the catgut ends long, to act as a drain. I then pulled the testicle and cord as far down as possible into the scrotum, and, leaving the catgut hanging out, stitched up the deep parts first, and then the edges, with strong catgut, and dressed the wound with carbolized wool. Patient was kept under opium for first few days, and on milk diet. Neither pulse nor temp. ever rose. Bowels were opened with enemata on sixth and eighth days, and cure has been most complete. Not a drop of pus formed. The points of interest this case has to practical surgeons are:

1. The large size of hernial contents when compared with the unusually small opening in internal ring.
2. The dilated canal and external ring by presence of testicle.
3. The rapid injury to omentum, and risk to life of bowel, and after only *three and a half hours'* strangulation.—*Edin. Med. Jour.*, Dec.

INDICATIONS FOR THE USE OF DIGITALIS.

BY J. MILNER FOTHERGILL, M. D. EDIN.

The correct use of this potent remedy—invaluable in certain cases of lack of power in the heart—is scarcely as yet general. Old established views take a great deal of uprooting; and yet they must be uprooted before new views can be built up in their place on the same ground. Digitalis was long regarded as a cardiac sedative—"the opium of the heart;" because it rendered the heart's action slower, or less tumultuous. Slower, certainly, in those cases where the rapidity is due to the action of an irritable muscle; irritable, because becoming exhausted. But when the rapidity of the heart's action is due to nervous disturbances digitalis is useless, or very nearly so. Digitalis, then, is not useful "because it slows the action of the heart." This is an error. In many cases it exercises no action worth estimating upon the rapidity of the heart's contractions. While in others it is of the greatest service when the action of the heart is not accelerated before its administration, nor slowed while the good effects are being felt. "Less tumultuous," most certainly in many cases. Where a heart is labouring hard, yet accomplishing very little; when the muscle is doing its best to the utmost of its power, but is heavily handicapped; then digitalis will usually calm its action, not, however, by any sedative effect, but by increasing the vigor of the cardiac contractions. In other words, it may be said that the digitalis achieves the more complete emptying of the ventricle at each systole; and that is what is wanted in these cases.

Now, sometimes digitalis will both slow the heart's action and do away with palpitation, at one and the same time. This is most commonly seen in simple dilatation of the left ventricle, without necessarily any valvular lesion; the mitral valve may leak, but not as the result of any distortion of the valve curtains, but rather the ostium has stretched with the yielding of the heart muscle, and the valve curtains become insufficient to close the ostium completely on the contraction of the ventricle. Such a condition is common where the dilatation has taken place too swiftly for the valve curtains to stretch *pari passu* with the yielding of the muscle. Here digitalis is usually of the most priceless value. But its utility will be greatly enhanced here by putting the patient at complete

rest; which means, strictly confined to bed—just as much as if the case were one of broken thigh.

"Digitalis is to be given in mitral disease, but withheld in aortic disease," is a rule of thumb driven into the student's mind like a nail into a plank, by some teachers. Well, as a broad rule it is well enough; digitalis is usually of service in mitral disease; but how about aortic disease? When a fairly hypertrophied left ventricle is struggling against a contracted aortic orifice, but not quite successfully; how about digitalis? The system is suffering from want of arterial blood because the ventricle is unequal to driving a *sufficiency of blood through the narrow ostium in the normal time* to keep the arteries full. Here digitalis often acts most potently, indeed furnishes the most brilliant illustrations of its properties. By increasing the vigour of the driving power—the ventricular contractions—the normal amount of blood is pumped into the arteries in the normal time, and tissue nutrition is improved everywhere; including the structures of the heart itself.

Or aortic regurgitation is dilating the left ventricle too swiftly for hypertrophy to be built up to arrest the dilating process; what is the value of digitalis here? Simply inestimable. It arrests the dilating process; the ventricle recovers its size, and, with that, much of its vigour; the muscle is better nourished, and then that compensatory hypertrophy is built up which often enables the patient to pursue an active life for years.

Certainly, on the other hand, both in aortic stenosis and aortic regurgitation, while the muscular compensation is complete and sufficient, and the patient is fairly well, there is no good end to be attained by giving digitalis. We do not give digitalis because there is valvular disease present; but when the system is suffering in consequence of the said valvular lesion. The digitalis has no influence on the injured valve. But it is of mighty service when the muscular hyperplasia, which compensates the valvular defect to a great extent, is not provided by the powers of nature. By the aid of digitalis the natural powers will often be enabled to surmount the difficulty and secure a muscular growth, or hypertrophy, which is practically compensatory. Such compensation by muscular hypertrophy is most perfectly seen in aortic stenosis. And on this hangs the good prognosis of aortic stenosis.

It is quite clear that under these circumstances the action of digitalis is powerfully aided (1) by rest, reducing the demand upon the heart; (2) good food to aid in nutrition of the tissues; and (3) iron as a hæmatic. In mitral disease the effect of digitalis upon the right ventricle often leads to most satisfactory results.

Now, when we come to discuss the effects of digitalis upon the right ventricle, there is something more to be considered than the heart merely.

There is the respiration! Ordinarily we breathe 18 times per minute or thereabouts. There are about 250 inches of "residual" air in the thorax, and the act of respiration takes place normally about 18 times per minute. By such "tidal" air the "residual" air is kept fairly pure. But when the thoracic space is encroached upon either by (a) air in emphysema; (b) connective tissue in cirrhosis; (c) diminution of the calibre of the air tubes from thickening of the bronchial lining membrane; (d) by engorgement of the blood-vessels in mitral disease; then the respiration must be more frequent in order to keep the residual air fairly pure. The stimulus to respiration is the effect of venous blood, laden with carbonic acid, upon the respiratory centre in the medulla.

When there is an excess of carbonic acid in the blood circulating in this centre, then the respiratory efforts are increased in vigour until the excess of carbonic acid is got rid of. Now, when the right ventricle is embarrassed, it is not usually enough to give digitalis to increase the energy of the contractions of the right ventricle. Though, of course, all medical men of much experience have met with striking illustrations of the almost magical effects of digitalis in the pulmonary engorgement of mitral disease; many can also tell where digitalis failed to afford relief under these circumstances, or even increased the respiratory embarrassment. Now, my rule for sometime past has been under these circumstances of mitral lesion, no matter what form with embarrassed respiration, to give strychnia, a well recognized "respiratory stimulant." Here, the effect of digitalis upon the right ventricle, and that of the strychnia upon the respiratory centre, work together for good with the most satisfactory results. The good effects of this combination are conclusively demonstrated in those cases where digitalis given alone, fails to do good; but where the addition of strychnia at once makes a striking alteration. Such a case occurred to me in Nov. 1881. A medical man had a mitral stenosis, with pulmonary engorgement, and, from cold, some congestion of the lung basis. Breathing was hurried; there was orthopnoea; digitalis had made him worse. Taking in the position on the line laid down above, I added strychnia to the digitalis with the most gratifying results. The breathing quickly fell in rapidity, and the patient could sleep without being awakened by violent dyspnoea, from the respiratory centre being roused by excess of carbonic acid in the blood circulating in it. (After the blood has been cleared of carbonic acid by violent respiratory efforts, the patient drops off to sleep again. Such nocturnal dyspnoea must be distinguished from the more serious matter of dyspnoea from distension of the right ventricle—a distinction not always made.) Now, under these circumstances, the addition of strychnia, or drug of allied character as ammonia to digitalis, is

of great service. Inversely, when there exists any condition of lung, or bronchiæ by which the respiration is embarrassed, or the thoracic space diminished, then digitalis may be added to the cough mixtures with decided advantage. Whenever the breathing is embarrassed and the radial pulse feeble, while the contractions of the heart are vigorous upon auscultation—a condition which tells that the right side of the heart is labouring—then digitalis may be given with a respiratory stimulant, as ammonia, or nux vomica, or both, to the great relief of patient. Usually that is; of course, if there be anatomical changes which forbid real relief, then the effects are less palpable. The proper relations of digitalis to stimulants of the respiratory centre is a matter far from being understood generally.

The indication, then, for digitalis is not a murmur in the heart; nor a certain form of valvular lesion; nor tumultuous action; nor yet rapidity of action; but, as Rosenstein has put it, whenever it is desirable "to fill the arteries and empty the veins." That is the impression which each student of medicine should form in his mind as to the action of digitalis. If he would do so, the doubts which otherwise may beset his mind in the exigencies of practice will not often embarrass him. Say it is a case of regurgitation; if the arterial system is well filled then digitalis is contra-indicated. But if the wall of the heart be yielding in the latter stages, then surely it ought to be given. In almost all stages of mitral lesion digitalis is indicated. But there is another condition in which digitalis is sometimes given with injurious effects which contrasts with these conditions. The hypertrophied gouty heart often palpitates when there is arteriole spasm, and the larger arteries are tense and full of blood. The resistance offered by this full arterial system to the onward flow of the blood at the cardiac systole is such that the ventricle palpitates in its efforts to contract effectually—such a condition is commonly seen in the "chronic Bright's disease without albuminuria," so well described by Dr. Mahomed. Here digitalis does no good but harm; for the arteries are already full to the risk of apoplexy. Indeed, this last accident has followed the administration of digitalis under these circumstances. The full artery, then, is contra-indication. Just as much as an empty artery is an indication for the administration of digitalis,—whether the heart be diseased or not.

Digitalis is a diuretic, says another. "Whenever the bulk of urine rises then I know that digitalis is doing good." The bulk of urine, as Traube taught, is the index of arterial fullness. When the arteries are filled the bulk of urine is increased. The rise in the bulk of urine tells in the most unmistakable manner that the action of the drug is filling the arteries. In dropsy, when the bulk of urine is low, and the specific gravity

is high, then digitalis is pre-eminently useful. When albuminuria is present from venous engorgement in heart failure, digitalis will often be followed by its disappearance. As the arteries are filled, the veins are depleted; the albumen which tells of venous congestion, disappears as this state of the veins is relieved; as the arteries are filled the bulk of urine rises.

The great matter for the practitioner to remember about digitalis is, that it increases the energies of the ventricular contractions; and that the clinical indication for its administration is an empty artery. Remember Rosenstein's maxim, "digitalis fills the arteries and empties the veins." With such views before his mental vision the practitioner will rarely experience any difficulty in deciding when to give, or when to withhold the potent digitalis—potent for good or harm according to the circumstances under which it is prescribed. In cases of cerebral anæmia digitalis may often be prescribed with advantage when it is desirable to raise the blood pressure within the arteries.—*Glas. Med. Jour.*, Dec.

CIRRHOSIS OF THE LIVER.

CLINIC, BY JAMES TYSON, M.D., PHILADELPHIA.

I have recently been showing you some cases of disease of the liver, and to-day I bring before you another of the same class. Our patient is 38 years old, is a tin-roofer by trade, and was admitted to the house September 27. He had always been healthy, but for the last four or five years has been what might be called a hard drinker, frequently going on sprees. For six weeks previous to his admission he had been drinking steadily. On the morning of the day on which he was admitted, he had a very profuse hemorrhage from the nose, and that night he had a second hemorrhage, which was checked only by packing the nostrils with tannic acid. He also had some nausea and loss of appetite. The second day after his admission (September 29), he noticed his limbs were swelling, but an examination of his urine revealed nothing abnormal. About the same time his abdomen began to enlarge. You can all see to what extent this enlargement has taken place, and by placing my hand on one side of the abdomen, and gently tapping the other side, I get distinct fluctuation, showing distinctly the presence of fluid. Now, what conditions will cause the presence of fluid in the abdominal cavity? First, we have obstructive disease of the heart, which, by overloading the venous system, causes the watery elements of the blood to exude through the walls of the vessels. An examination of this man's heart fails to reveal any lesion; so we can exclude this. In the second place, it may be caused by renal dis-

ease. But if there be any disorder of the kidney of sufficient gravity to produce the amount of ascites present in this man, it would undoubtedly produce albuminuria; and we have failed to find any albumen in this man's urine. Excluding these two, then, narrows it down to the third—*i. e.*, some interference with the portal circulation. Let us examine the liver and see if we can detect any alteration in it.

Having the patient on his back, percussing in the mammillary line, we find that dulness begins at the fifth rib and extends to the edge of the ribs. In the line of the ensiform cartilage there is tympany all the way from it to the umbilicus. In the mid-axillary line, dulness begins at the seventh interspace, and passes without interruption into the dulness occasioned by the ascites. In percussing the liver you will find it to be more easily mapped out by having the patient lie on the left side and draw up his thighs towards his abdomen; and I will now percuss him in that position. Going back to the mammillary line, we find dulness begins at the sixth rib and is replaced by tympany at the eighth rib. In the mid-axillary line dulness begins at the seventh rib and is replaced by tympany at the tenth rib. Posteriorly, dulness begins with the tenth rib and merges into that of the lumbar muscles. By this examination you perceive the liver is smaller than normal.

Now, what diseases are there in which the liver is smaller than in health? I can recall but one,—cirrhosis, or interstitial hepatitis. Let us now take up this man's symptoms, and see wherein they accord with the phenomena of this affection. The first thing that he noticed was the hemorrhage from the nose, and I called your attention to this symptom. What was the cause of it? It was entirely mechanical. The blocking up of the portal system causes engorgement of the veins all over the body, and the hemorrhage from the nose was simply an effort of nature to relieve the engorgement. Hemorrhage into the stomach and intestines is a more frequent symptom, and is even more directly accounted for. Next there is the ascites. We have seen that the liver is smaller than normal, and this contraction must necessarily compress the vessels which pass through its substance. As a result of this, the current of the blood is retarded, and the serum exudes through the vessel-walls, producing the ascites.

Let us for a few moments consider the etiology of the disease. It is an error to regard the use of alcohol as the only cause of cirrhosis. In the vast majority of cases it doubtless is the cause; but I have seen cirrhosis in children two or three years of age and in young men of twenty; and Dr. Harley, in his recent work on the liver, refers to such cases (p. 307). The use of liquor, syphilis, and a prolonged exposure to malarial influences will produce it. When seen in very young subjects, it

may generally, with very good reason, be attributed to congenital syphilis.

Let us pause to consider briefly the morbid anatomy of the affection. In this case the cirrhosis is evidently due to alcohol. In the excessive use of this substance the liver is the first organ to suffer organically, because the alcohol reaches it immediately after its absorption, in a comparatively unaltered state, and diluted only by the secretions of the stomach. Acting as an irritant, if long continued it soon excites an overgrowth of the connective tissue along the ramifications of the portal vein. The first product is a round-celled embryonic tissue, by the presence of which the bulk of the liver is actually increased; but, organizing into fibrillated connective tissue, it has the property of all such new-formed tissue, it contracts, and compresses the proper parenchyma of the organ,—that is, the cells,—and destroys them. When the cirrhotic formed by the smaller branches of the portal vein are involved, the areas included in them are compressed and forced to rise upward, forming grain-like elevations, whence the term "granular liver." When branches of medium size are involved, larger areas of liver-substance are compressed, and elevations, of which many correspond in size to the hob-nail, are produced, and there results the so-called "hob nail" liver; and when still larger branches of the portal vein are involved, we have even larger bulging areas, and a "lobulated" appearance results.

As to the treatment, I am confident that small degrees of interstitial hepatitis may be removed by appropriate measures; and even where the overgrowth of interstitial tissue is decided, the process may be so modified that the liver will be able to perform its offices. Most important, however, is the removal of the cause; and where this is the excessive use of alcohol it must be discontinued if any results are to be expected.

The remedy for the removal of the hyperplastic connective tissue is pre-eminently iodide of potassium. It is best given in moderate doses while fasting, and in a large quantity of water. Two and a half grains in a tumblerful of water and on an empty stomach will do more good than five grains in a small quantity of water after meals. Along with this, the bowels must be kept active with salines. If there be any specific taint, one-thirty-second to one-twenty-fourth of a grain of bichloride of mercury may be given along with the iodide, three times a day. In malarial cases iron and arsenic are indicated. Counter-irritation over the region of the liver may be produced by an ointment made of equal parts of mercurial and belladonna ointments. In this patient the treatment has been five grains iodide of potassium, largely diluted, three times a day, fasting, and his bowels have been kept freely open by the administration of salines. He has greatly improved under this treat-

ment, and says that he is very much better. There is still, however, some fluid in the peritoneal sac, which had much better be removed by tapping; and I had intended to tap him in your presence, but he objects to the operation, and I will not insist upon it. He will improve much more slowly than if this water were taken away.—*Medical Times*.

DISEASES OF THE HEART.—BALFOUR—In lecture ix, on the variation and vanishing of cardiac murmurs, Dr. Balfour offers a good deal of sound advice to practitioners, many of whom, he very justly remarks, are not at all aware how frequently complete restoration to health may follow after perfect development of regurgitation through either, or even through both valves. The curious phenomenon of variation in the same murmur, which may completely disappear one day to be present again the next, and the failure to appreciate its significance, have sometimes led to erroneous and embarrassing statements of opinion of the most contradictory nature. Perceiving the great desirability, therefore, of avoiding this confusion, Dr. Balfour gives directions for conducting a thorough examination of the heart in such a manner as shall prevent all possibility of deception being caused by such murmurs, and during which the stethoscope need not be employed at all. "If we trust," he urges, "to auscultation alone, as it is generally understood and applied to the heart—that is, if we attempt to diagnosticate the exact nature of any given cardiac lesion by the discovery and discrimination of murmurs, assigning to each its appropriate physical cause in accordance with its position on the cardiac area at which it is best heard, as well as with its rhythm or relation in time to the several acts which constitute a cardiac pulsation, without being actually misled we shall yet often fail in attaining an accuracy of diagnosis which is perfectly possible and frequently important." The value of strychnia as a stimulant of the intrinsic ganglia is pointed out, and a strong defence of arsenic as a neurotic is presented. Dr. Balfour, moreover, insists that no drug can replace digitalis in the treatment of cardiac disease, and places little trust in ergot and belladonna in this connection. The iodide-of-potassium treatment of aneurism Dr. Balfour considers perfectly safe and free from risk, while being equally certain as any more dangerous plan to afford relief. He has "not yet seen any case where relief was not attained, though naturally enough that relief is not always to be got instantaneously, but requires the treatment to be continued some time." He, however, warns against expecting absolute cure, or indeed anything more substantial than relief, except in favorable cases which come early under treatment, and in which adjuvant treatment, such as rest, etc., can be carried out. Dr. Balfour says:

"I do not claim that we can perfectly cure aneurism by iodide-of-potassium, or by anything else, yet I am quite certain that at the present day we possess no other remedial agent or mode of treatment which so surely gives relief, and so frequently prolongs life, as the iodide-of-potassium."—*Louisville Med. News*.

HYSTERO-TRACHELORRHAPHY.—Dr. Herrick, of Grand Rapids, Mich., gives the following in the *Obstetric Gazette*:—In 1880 I reported for the *Philadelphia Medical and Surgical Reporter*, vol. XLII, No. 3, a "modification of Emmet's operation" which had for its object the doing away of sutures through the uterine mucous membrane, claiming that they were unnecessary, as good union could be had without them, thus saving the patient much pain, and the operator no little trouble; and making professional assistance not absolutely necessary, as the patient could be operated upon without being etherized. As the introduction of sutures is the most tedious step of the operation, it is also the most painful to the patient, and is the only part requiring special skill. The modification in brief is as follows: The lacerated edges of the cervix are denuded as usual, care being taken that they are properly coaptated; then, instead of introducing sutures, a wide elastic rubber band shaped like the cervix, and large enough to cover the whole os and neck with the exception of a hole in the end for the secretions to pass through, is slipped over the os while the lacerated edges are held together by a pair of tenaculum forceps, over which the band is first passed. The band being wide and covering the whole neck, it keeps up equal pressure on the blood vessels, thus preventing blood enough getting into the parts at any one time to produce inflammation or swelling, and, as a natural sequence, union takes place much sooner than it otherwise would. The introduction of sutures is quite often followed by inflammation, and when suppuration follows there is non-union, which is prevented by the use of the elastic band. The advantages of this method are: 1st. As about all the pain experienced during the operation is from the introduction of sutures, if they are not introduced there is little pain, and hence an anæsthetic may be dispensed with. 2nd. If the patient is not etherized it is not necessary to have professional assistance, and one can operate upon patients that would not listen to such a proposition if strange physicians were to be present. 3rd. The parts are kept in just as close contact, and union takes place just as soon. 4th. There is less danger of inflammation. 5th. There are no stitches to remove. 6th. In slight cases, patients can be operated on without their being obliged to keep their beds for a single day, or their knowing that they are undergoing any important operation. Since the publication of this method of operating

in the *Medical and Surgical Reporter* the operation has been frequently performed, as modified not only by myself but by many other surgeons, some of whom have published their results, which have been uniformly successful. Some have objected that it is somewhat difficult to throw the band around the cervix, and to always get a band that will fit every case. Considerable care is sometimes necessary in its accomplishment, and I have found that there are other ways of retaining the lacerated edges in apposition, and the following is the plan I most frequently adopt, as it does away with that objection, and holds the parts as firmly together as though sutures were introduced through the cervix.

I take a piece of block tin about one sixteenth of an inch thick, and long enough to reach around the cervix, then cut a strip wide enough to cover the cervix from the vaginal juncture to the end of the os. I then punch from three to six holes through each end of the strip, through which I pass silver wires, which are twisted with a pair of forceps until the cervix is grasped sufficiently tight to hold the lacerated edges firmly together. This procedure is easily accomplished, and answers every purpose of sutures.

RULES FOR EXAMINATION OF URINE.—During a private lecture on the pathology of renal diseases, Dr. Formad gave the following practical points as "rules for examination of the urine :"—

1. Sediment in the urine has no significance unless deposited within twenty-four hours.

2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen.

3. Every white crystal in urine, regardless of shape, is a phosphate, except the oxalate of lime, which has its own peculiar form, urine alkaline.

4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline.

5. Mucus, casts, pus, and epithelium signify disease of the bladder (cystitis) or of other parts of the urinary tract, as determined by variety of epithelium.

6. The urine from females can often be differentiated from the urine of the male, by finding in it the tessellated epithelium of the vagina.

7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen.

8. Broad hyaline casts and epithelial dark granular and oil casts signify chronic catarrhal nephritis. At first, albumen; later, less.

9. Hyaline and pale granular casts and little or no albumen signify interstitial nephritis.

10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease.

11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts or devour them entirely in a short time.

12. Uric acid in the urine may in Trommer's test for sugar form a protoxide of copper, thus often deceiving the examiner in the belief that he has discovered sugar. Thus when urine shows only a trace of sugar, other methods of examination, besides the Trommer's, must be used—preferably the lead test.

13. The microscope gives us better ideas of the exact condition of affairs in the examination of urine than the various chemical tests. Therefore the time has come when every true physician should know how to handle a microscope.—*Louisville Medical News*.

THE SEQUEL OF A MEMORABLE OPERATION.—A few days since Prof. W. H. Pancoast, at a clinic in the Philadelphia Hospital, introduced a young man who was once the subject of a remarkable surgical operation, being the separation of an infant from a monstrosity which was virtually another chaotic foetus developed from his cheek. The person referred to was G. W. Lytle, a young man of twenty-four, residing at Cornellsville, Pa. His only peculiarity was a deep scar on the left cheek. Dr. Pancoast then gave the class an account of the operation, of which there had been but three performed, one each in London, Paris and Philadelphia, and which consisted in cutting apart two children who were congenitally attached. The operation was performed twenty-four years ago, by Prof. Joseph Pancoast, when the young man at the clinic was an infant of seven months. The child was born with an appendage growing from the left cheek, which was nothing else than an imperfectly developed infant, with hands, feet and trunk, but no head. The operation was performed at a clinic in Jefferson Medical College, and was witnessed by many of the prominent physicians of the city. The operation was fully described in the *Medical and Surgical Reporter* by Dr. R. J. Dunglison. It was considered bold surgery, but Dr. Pancoast was confident of its propriety, and accordingly performed it, with what success was shown by the presence of the patient himself, nearly a quarter of a century later. An interesting feature of the operation is its having been performed with the écraseur, then a new instrument, and the first of the kind ever used in America, and brought from Europe by the elder Pancoast. Upon dissection the monstrosity was found provided with heart and gastro-alimentary tract, as well as the organs already referred to. The case attracted considerable attention abroad, and at the request of the eminent English surgeon, Sir James Paget, a cast of the detached mass and a photograph of the child before the operation were furnished to the museum of St.

Bartholomew's Hospital, London. Dr. Pancoast exhibited a copy of the daguerreotype sent to Sir James Paget, and said he would have a photograph of the young man taken after the interval which has now elapsed, and which testifies to the wisdom and success of the operation — *College and Clinical Record*.

ECZEMA.—Jonathan Hutchinson, F.R.C.S., *Med. Press and Circular*, gives the following:—

The symptoms are in a large majority of instances so far local that it is curable by local measures, and scarcely, if at all, by constitutional ones, whether drugs or restrictions as to food. Yet it is probable that there is always a minor degree of constitutional proclivity, and this is sometimes proved to be hereditary. In a few cases dietetic restrictions do appear to have important influences, as, for instance, the forbidding of milk and sugar. I have already alluded to the remarkable way in which eczema appears to aggravate itself, and when once it has begun is its own source of extension. Probably a great many cases which become severe and general might have been stopped in the beginning by appropriate local treatment. In most forms of eczema arsenic is useless, and this fact serves to detach it definitely from the psoriasis group. There are, however, certain forms of nummular eczema in which well-margined patches are scattered symmetrically over the limbs and trunk, in which the disease approaches very closely to a form of psoriasis group. There are, however, certain forms of nummular eczema in which well-margined patches are scattered symmetrically over the limbs and trunk, in which the disease approaches very closely to a form of psoriasis, and is more or less under the control of the specific for the disease.

Putting aside a large number of mild or local cases which are clearly due to local causes, we encounter severe eczema in the following forms:—First, as a disease of the dentition period of infancy, or what is often equivalent, the lactation or milk-fed period; second, as a most persisting and troublesome eruption affecting only special regions in children and adults, as, for instance, the hands, the lips, and the anus; thirdly, as a general and severe eruption in advanced adult or senile periods of life. It is a noteworthy fact that when infants who have suffered very severely get well, they usually get quite well, and remain well through life. General attacks affecting the whole body occur for the most part near the extremes of life. Applications containing tar, if weak enough, will almost always both prevent and cure eczema. Sea air is often definitely advantageous, and the disuse of milk and sugar is often important.

With such facts before us can we find answers to the questions: Is eczema usually a sign of gout, or any allied condition of defective digestion? Is it catarrhal? Is it due to structural idiosyncrasy

of the integument? I should incline to reply that it is certainly not catarrhal in any correct use of the word. It is not produced by the common causes of catarrh, nor does it display the clinical course of all catarrhs in the tendency to spontaneous recovery and frequent repetition. Next, in many cases, it does imply a minor degree of mal-assimilation alleged to gout, and is benefited by abstinence from beer and wine. Recent experience has led me to believe that the offending article is often milk, and to think it of importance to restrict it as much as possible. In very many, a large majority of cases, there is no true gout, either in the patients or relatives.

MYXEDEMA.—Dr. Allan McLane Hamilton has recently published a case of this disease. It is generally believed to be rare, not more than fifty cases having been reported since Sir Wm. Gull reported the first cases to the London Clinical Society in 1873. It is possible, however, that its rarity is due to the fact that Sir William's descriptions of it are not generally known to the profession and that it is often confounded with other diseases. It has been called a "cretinoid state supervening in adult life in women." There is more or less swelling diffused over the whole body, the skin has a peculiar harsh doughy feel but does not pit on pressure like ordinary œdema. Eruptions are sometimes noticed, which are not inflammatory, but transude a clear liquid and disappear speedily. The understanding appears to be obtuse, the hearing dull, speech slow and locomotion feeble, as though fatigued by carrying a great load. The thyroid gland has been found atrophied, the hair thickened and the nails flattened. The mental obtuseness has caused the disease to be looked upon as a kind of cretinism, resembling the *endemic* disease of that name found in the south of Europe. Some of the cases have exhibited temperature below the normal—96° to 97°, have experienced severe *hemisrania* and a peculiar difficulty in expressing linguals in speech. The complexion has the peculiar waxy hue so often seen in diseases of the kidneys, but albumen is rarely seen in the urine. The pulse is small, the sphygmograph tracings indicate increased arterial tension, but no cardiac disease has been observed. Numbness and formication of hands and feet have been a cause of complaint. *Anæmia*, deficiency of red corpuscles, and greatly increased frequency of pulse after slight exertion have been commented upon. The French have named the disease *cachexie pachydermique*, because of the constitutional symptoms and the peculiar thickness of the skin. Hearing, smell and taste are often lost or greatly interfered with. The ophthalmoscope has revealed nothing positive. The disease is very rare in males, has not been seen earlier than the fortieth year and seems to be almost confined to women who have

passed the *menopause*. All of the women attacked have been very fertile—families ranging from five to ten children with some miscarriages. Great fecundity of patients has been brought forward as evidence that exhaustion of the sympathetic nervous system is at the bottom of the disease. The pathology of the disease is as yet unsettled, one school of observers endeavoring to confine it to the cerebro-spinal nervous system, another to the sympathetic system and a third think the trouble is of *peripheral* origin, that there is primarily obstructed lymph channels with *infiltration* of *serum* into the connective tissue and end organs of nerves. The prognosis is bad, one case only known to have recovered. Autopsies have been few. It must be readily recognized by the characteristic hardening and thickening of skin, mental obtuseness, lowered temperature, atrophy of thyroid gland and diminished general cutaneous sensibility. Treatment has been nitro-glycerine, amyl nitrite, baths and iodide of potassium.—*Mich. Med. News.*

THE BACILLUS.—Some one has said that "history repeats itself." This aphorism, in some respects, is just as applicable in the history of science as in the history of society. Medicine has its "new departures" and fashions as surely as any other factor in human events. This, of course, is more commonly so in "æsthetic" medicine—homœopathy—but occasionally it reaches the scientist. It was the fashion in the primitive days of medicine to represent disease as an indwelling foe, a mighty homunculus, who sized upon the vital forces within the body, controlled their action, traversed the great avenues of circulation and besieged the very citadel of the soul itself, and if not defeated in time the patient must die. Succeeding this came the age of humors. Then special influences, where each organ was governed by its particular Deity. Then inflammation was the sole cause of all human infirmities. And now we return again to the original idea, that of the personification of disease. Hence it is the fashion to hunt out this microscopic enemy, define his shape, size and habits of life. Give him a name, and then, if this style is not after our ideas of propriety, educate and civilize him, that he may become a potent soldier to war against his barbarous ancestors. Jenner "bultled wiser than he knew" when he tamed the vicious spirit of small pox virus and made it a protecting agent against that dreaded disease. Commencing with his experiments, the idea of the bacillus has gradually engrafted itself upon the minds of medical investigators, until today we have it claimed that the great catalogue of the most serious diseases known to men are produced by the presence of bacilli in the body. Salisbury years ago gave us the bacillus of malaria, and Crudelli, from Italy, adds his testimony to confirm the theory. From Germany we have bacillus

typhosus—Klebs; from France bacillus anthracis—Pasteur; from Berlin bacillus tuberculosis—Koch; from Philadelphia bacillus of diphtheria—Wood and Formad; and from Chicago bacillus of swine-plague—Detmers, with several others to hear from. The experimental researches by these experienced and careful investigators have been so conducted as to inspire the confidence of the profession, and have no doubt established the fact that the presence of certain parasites is really the cause of certain forms of disease. Yet it is well for us to remember that there are other forces acting to undermine the health of our people. Sir Charles Lamb once remarked, that "we often laugh at the folly exhibited in a large flock of sheep, by their great haste to jump a fence, just because the principal sheep in the flock led the way, but we forget that we sometimes are governed by the same influences." So in medical science. We are too apt to rush off after some new theory, just because one of the leading workers has declared his faith in that direction. The great Vienna "Simon" (Billroth) says, "thumbs up," and n goes the great surgical thumbs all over the world; and alas! for the poor stomach that must be resected. And Lister declares for spray and gauze, and he who fails to use them is not in fashion. Now, we do not wish to be understood as underestimating any of these advances, but let us remember that the saving quality of the true physician is caution. "Prove all things and hold fast to that which is good." So with the bacillus. We should be sure of our enemy before we forsake the precepts of our fathers and their weapons of fighting disease, and when we have carefully determined between those diseases which are parasitic and those which are not, then the practical question to be investigated is, what shall we do with this microscopic enemy? But don't forget that he may be present, and still not be the cause of the trouble, or you may direct your batteries against an innocent party. Lister fences him out with spray, and oiled silk, and gauze. Deplat fights him with phenic acid, while Pasteur captures the little demon, civilizes and domesticates him, and makes him a useful member of society. Each method, no doubt, has its proper place, and we have every reason to believe that progressive investigators will separate the truth from error in all this work, and when the pathology is clearly established the mode of action will soon be well defined.—*West. Med. Reporter.*

A SPOON IN THE STOMACH.—On the 10th of September of the present year a youth, whilst playing with a spoon, swallowed it. He was taken at once to the Hospital Lariboisiere, Paris, where he complained of pain in the epigastrium and tightness of breathing. During the day vomiting set in, the patient could not sleep, and there were no signs

of the offending article changing its position. The size of the spoon, too, made its passage either way very problematical. It was $9\frac{1}{4}$ inches in length (24). M. Felicet, in whose charge the patient was, determined upon gastrotomy. Before the operation was commenced the stomach was washed out with Vichy water. After the peritoneum was reached and the bleeding had been checked—the stomach had been distended with ether vapor, which was forced in by means of a pump—the peritoneum was now divided on a director, whereupon the now distended stomach wall bulged through the opening. Before being opened, the stomach was stitched to the abdominal wall, and the firmness of the stitches was tested by further distension of the stomach with ether vapor. The stomach was then opened, and the spoon removed. Lister's dressing was employed. The further course was favorable, and the patient was discharged after three weeks, with only a small fistula remaining.—*Medical Press.*

TREATMENT OF ENLARGED TONSILS.—The *Medical News*, quoting from the *Lancet*, relates the following expedient when the tonsils are enlarged and when excision cannot be performed. Dr. Gordon Holmes advises a method of applying the common caustic to the tonsils, which appears to have remained hitherto unnoticed. The tonsil, as the anatomist knows, is permeated by several rather large channels around which the follicles are collected, opening on the pharyngeal side of the gland, whence its characteristic cribriform aspect. Their orifices, about seven to fifteen in number, are sufficiently evident to be counted on the healthy tonsil in situ, whilst in the hypertrophied condition these openings increase greatly in calibre and depth, and can be ascertained by a probe to vary from one-eighth of an inch to half an inch in length, with a diameter capable of admitting a style of ordinary size. These observations, then, afford a valuable indication for treatment; for through these natural canals a way lies open to attack the heart of the gland in a most efficacious manner with caustics. Thin pointed sticks of nitrate of silver or chloride of zinc can easily be pressed into the lacunæ and worked around for a few seconds. Small sloughs are thus formed, which are soon discharged, and in the process of this treatment the tonsils are hollowed out in one direction whilst being contracted into much smaller bulk by the subsequent cicatrization in another. Two or three channels in each tonsil can be cauterized daily or on alternate days, and we can thus act on a comparatively large surface whilst causing but slight external soreness and little or no suffering to the patient. In practising this method, although the stronger caustics may be used, he does not think it will be necessary to have recourse to anything more potent than nitrate of silver, which acts much

more effectually on the tender, internal structures of the tonsil than when applied to the comparatively callous pharyngeal surface.—*Chicago Med. Review.*

THE "SALISBURY" TREATMENT OF PHTHISIS.—In the opinion of the author, consumption comes from continued unhealthy alimentation, and must be cured by removing the cause. "This cause," he says, "is fermenting food and the products of this fermentation;" and if the simple directions contained in the book "are faithfully followed out and persisted in, consumption in all its stages becomes a curable disease." Beginning at the first direction, half a pint of hot water is to be drunk an hour before each meal and on retiring, to wash out the stomach. Tea, coffee, or beef tea may be drunk at meals, and hot water or beef tea in the intervals, if desired. For food, broiled beefsteak, without fat or bone, broiled chicken or game, oysters, and fish, free from fat are prescribed, with bread, toast, rice, cracked wheat or oatmeal, in the proportion of one part by bulk to from four to six parts of meat. Soups, vegetables, fruits, pies, cakes and sweets, pickles and preserves, fried edibles generally, and vinegar are prohibited. Meals are to be taken at regular intervals, and the patient should eat either alone or with others using the same diet; and after the appetite increases, as it soon does, lunches of broiled beefsteak and tea, coffee, beef tea, or hot water are permitted between the regular breakfast, dinner and supper. In the way of general regimen, two thorough baths with hot water and soap are to be taken every week, oiling the skin all over afterwards, and every night and morning the body is to be sponged with hot water, containing for the evening bath a few teaspoonfuls of ammonia. Flannel is to be worn next the skin, and the clothing frequently changed and aired. This, with as much open-air exercise as can be borne without fatigue, or thorough rubbing and pounding of the body morning and evening for those too weak to take exercise, constitute the substance of the treatment; but simple tonics of oil of peppermint, orange peel, ginger, witch-hazel, and other mild ingredients are to be administered before each meal, with small doses of pepsine afterwards, and a hemorrhage is to be checked by inhaling the spray of a weak solution of persulphate of iron.—*Boston Four. of Chem.*

SAFETY HYPODERMIC INJECTOR.—The little instrument which is accurately represented in the figure is intended as a substitute for the hypodermic syringe. The injector consists of two parts: an elastic measuring ball and an injecting needle; the latter is provided with a boss, which serves for a handle during its introduction. It is conveniently furnished with a joint, so that the same needle

may be adjusted on several measuring balls. The prefix "safety" is employed to indicate the important fact that its simple construction affords a valuable safeguard against accident, and that it renders an overdose practically impossible. The measuring balls are made in different sizes, and each ball is capable of holding only a definite amount of fluid, the quantity varying from one to twenty minims. The number placed on the exterior of each ball expresses its capacity, so that by selecting an injector the exact dose can be at once administered.



The instrument can be instantly charged by compressing the elastic ball and inserting the point of the needle or the open end of the joint into the fluid to be injected, and it is generally advisable to repeat this little operation two or three times to ensure the complete expulsion of air. It can be discharged slowly or rapidly under the skin, and this is of course regulated by the pressure of the thumb and finger. It can be washed out and cleaned in a moment, and it is no trouble to keep in order for any emergency. It cannot be broken by an accidental fall, which is too often the fate of the hypodermic syringe, and when it is worn out, it may be very easily replaced. The injector can be used if necessary under the bedclothes, and as a mistake in the dose is impossible, the performance of the operation does not require the guidance of the eye. It has still another important quality, which cannot fail to increase its utility—the cost is so moderate that a separate instrument can be used for every remedy as well as for every patient.

In conclusion, the safety hypodermic injector will serve many important surgical purposes, and is a perfect substitute for the syringe in the treatment by injection of nævi and other tumours. It is made by Messrs. Mayer and Meltzer, 71, Great Portland-street, and can be obtained from that firm in the form of a single instrument, or in a little case containing several injectors of various sizes. The surgical needle is furnished with three openings at the point to facilitate the escape of fluid into the tissues.—*Dr. Cousins in Lancet, Dec. 9th, 1882.*

ACUTE MILIARY TUBERCULOSIS.—[The following is an extract from the *Lou. Med. News* of a clinical lecture by Dr. Whittaker, Cincinnati.]—**ED.** This man came into the house with the symptoms of typhoid fever: he had nose-bleeding, bronchitis, tenderness to pressure over the abdomen, diarrhea and a roseola. It was a clear case of typhoid fever; but we kept a record of the temperature. It did not show the "step-ladder rise in the first week,

nor the continuous fever of the second and third weeks. It was higher in the morning than in the evening, a most suspicious circumstance. Instead of falling on the twenty-first day or thereabout, it continued, and it still continues now, at the end of the sixth week, long after the subsidence of all typhoid symptoms. Six weeks have now passed and our patient is no better. On the contrary, he is worse; he has night-sweats, he is reduced in flesh and strength, he has no appetite, and he not only continues to cough, but he has an expectoration, scant, it is true, but of peculiar character, glutinous, flocculent, and so heavy that it sinks to the bottom of a vessel containing water. His temperature varies now between 101° and 102° ; his breathing is shallow, superficial, and hurried on the least effort. There are fine dry rales all over the chest, but there is, as you observe, no dulness; on the contrary, there is an increased resonance every where, at the apices where there is almost tympanites.

A practitioner of the "experience" school would declare this case to be a relapse of typhoid fever, or at most a complication with caseous pneumonia or phthisis florida. But there is no proof that this patient ever had typhoid fever; for in the first place there never was any "smoke" about the brain, his mental faculties have always been perfectly clear; and in the second place, a point upon which we lay especial stress, he has never shown the range of temperature which distinguishes this disease. Now a man may have typhoid fever absolutely without fever, as without any other one symptom of the disease; but such cases are very rare, and we are only justified in accepting them when they occur in connection with other cases distinctly pronounced. Besides, in this case, the abdominal symptoms peculiar to this disease all subsided in the course of the first week, whereas they should have become more marked. There are cases wherein a differential diagnosis of typhoid fever and tuberculosis is impossible, if we depend upon either the subjective or objective signs. I have seen some of the most glaring mistakes of this kind made by the best clinicians in the world. I have seen a diagnosis of typhoid fever tied to the big toe of a patient in the post mortem room when there was not a sign of disease in the abdomen, and where the smiles that arose on the faces of the pathologists were at the expense of the clinician. Every text-book will teach you that a diagnosis is sometimes impossible. There is not a symptom of either disease that may not be present in either. But how important it is to make a diagnosis, especially in these diseases, because a patient revives from one and dies from the other, in the rule.

In our day we have a means of making an absolute diagnosis, and we have made an absolute diagnosis in this case. We have arrived at it in the simplest possible way. We have examined the

sputa under the microscope, and found in it the bacillus tuberculosis which most emphatically and unmistakably stamps the disease. We have not been content to interrogate the outside of the body for the condition within. We have inquired of the messenger which comes from the seat of the disease, and we have received a definite response. You may examine and infer as much as you please, but you will never know definitely what kind of fluid is in the pleural sac until you put in the needle with the aspirator, and this you can do with a hypodermic syringe and determine the matter while your reflecting neighbor is ruminating the records of his experience, or is ruminating upon the uncertainties of our art. And you may study up all the books in an obstinate case of rheumatism for something to give the patient for a change, when it may occur to your successor at once to find some trichinae as its cause. So have I seen a case of Bright's disease diagnosed in the twinkling of an eye almost, by the introduction of a catheter into the bladder of a comatose patient who was regarded as an apoplectic; and many a case where a hypertrophied prostate was detected as the cause of dribbling of urine, and not a paralysis of the bladder, by the quickest and easiest kind of an examination. These things do not belong to this case, but they do belong to every-day practice, and they teach us when they happen to us that diagnoses are not made in the rule by long reflection, but they come for the most part like a flash. They come because we take the trouble to act. It is a reflection to our discredit that we did not diagnose this case by at least the end of the first week, when the typhoid symptoms proper disappeared; but it was looked upon as anomalous, and it was absolutely believed that it would prove abortive.

ATROPIA FOR EARACHE.—The most effectual treatment, and the one which has stood the test for years, says Dr. A. D. Williams in the *Chemist's and Druggist's Bulletin*, is the local application of a solution of the sulphate of atropia. Not a single case but has yielded at once. The solution is to be simply dropped into the painful ear and allowed to remain there from ten to fifteen minutes. Then it is made to run out by turning the head over, then being wiped with a dry rag. The solution may be warmed to prevent shock. From three to five drops should be used at a time. The strength of the solution must be varied according to age of the child. Under three years one grain to the ounce, and over 10 years, four grains to the ounce of water. In grown persons almost any strength may be used. All ages will bear a stronger solution in the ear than in the eye. The application should be repeated as often as may be necessary. Usually a few applications will stop the pain. In acute suppurative inflammation of the middle ear,

and acute inflammation of the external meatus, atropia will only slightly palliate the suffering, but in the recurring nocturnal ear-aches of children it is practically a specific.—*Medical Record*.

PUERPERAL FEVER.—In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowe, on "Puerperal Fever; its Treatment and Prevention," in which occurs the following judicious expression of views in regard to treatment:

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly-acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contra-indicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless; and yet these remedies have been vaunted and are actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I have indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulpho-carbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience; and I would strongly urge that all depressant remedies are both hurtful and dangerous."

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.—*Am. Med. Digest*.

LINEAR INCISION IN CANCER OF THE RECTUM.—At a recent meeting of the Société de Chirurgie de Paris, Dr. Trélat reported a case of extensive rectal cancer in a man fifty-six years of age, in which marked relief followed linear incision of the rectum. The patient was too weak to permit of an operation for artificial anus, so a longitudinal incision was made with the thermo-cautery through the posterior wall of the rectum. The man's condition improved at once, and his life was prolonged for eight months after the operation. In the discussion which followed this communication, Dr. Vernéuil stated that he had practised this operation

many times with benefit. Le Dentu related five cases in which he had performed linear incision of the rectum in cancer with immediate relief of the pain and tenesmus. Desprès was opposed to the practice and preferred gradual dilatation.—*Bull. Soc. de Chirurg., Paris.*

AN EASY METHOD OF EXTIRPATING SMALL TUMORS AND ULCERS.—Dr. C. Johnston spoke of such a method, very simple, but affording extremely good results. Warts sometimes lead to malignant growths. These and other local affections, as ulcers and skin cancers, may require removal on account of their nature or because of the disfigurement they occasion. Here swiftness and certainty are needed. The knife is objectionable, because it makes a ragged edge and sometimes penetrates too deeply. Dr. J. employs a circular gun wad-cutter, of which there are various sizes. This acts as a trephine and makes a smooth, and clean circular incision. The margins can be approximated by silver-wire suture, or can be simply treated with carbolyzed oil and prepared cotton: the latter was most frequently employed by Dr. J. In performing the operation the cutting edge of the instrument is applied over the morbid growth and a half-turn of it is made, followed by another half turn. A tenaculum is now applied to the still attached button of tissue, which being lifted, is removed by one horizontal sweep of a knife. When upon the cheek a finger should be inserted into the mouth for the support of the tissues while the trephine is being used. The operation requires an anæsthetic, as chloroform, or bromide of ethyl as used by Dr. Chisholm, or local anæsthesia by ether or ice.—*Maryland Med. Journal.*

GELSEMINUM IN TETANUS.—Referring to Dr. J. B. Read's paper as to the use of the liquid extract of *Gelsemium sempervirens* in the treatment of tetanus I would make the following remarks: During the session of 1873-74 I communicated to the Liverpool Medical Institution a paper on the physiological action of that drug, and as the result of many observations and experiments, came to the conclusion "that the principal effects produced by large doses are extreme muscular relaxation without either stupor or delirium. In these respects," continues the paper, which was published in April 1875, "its action seems somewhat akin to that of *Conium maculatum*, and these effects would seem to point to its probable utility in tetanus and other disorders attended with severe muscular spasms."

During the following session, Dr. Spratly of Rock Ferry, honorary surgeon to the Birkenhead Borough Hospital, communicated to the Liverpool Medical Institution a report of several (I think three) cases of traumatic tetanus, which he successfully treated by means of gelseminum in the man-

ner indicated by Dr. Read, the doses of the drug, being very large, and the effect in each case eminently satisfactory. One of these cases, which, by Dr. Spratly's courtesy, I had an opportunity of seeing was very severe.—Dr. W. Carter, *Brit. Med. Journal.*

BANTING OUTDONE.—A somewhat novel plan of reducing corpulency to graceful dimensions has been devised by a German medical writer. The author, in a small pamphlet (*Corpulency and its Cure according to Physiological Principles*, by Dr. W. Ebstein, Wiesbaden, second edition, 1882), points out defects in the various treatments in vogue—Banting's and the mineral-water system. The curious thing, however, is his own method, which, he says, has the venerable authority of Hippocrates. In the author's opinion, corpulency is caused by too great a quantity of albuminoids and of sweets; and the cure is, to diminish these and to increase the quantity of fat in the food. He gives an example of the success of his dietetics. A healthy man, forty-four years of age, who, from his twenty-fifth year, had begun to grow very stout, owing to a sedentary life and to the dietetic use of an excess of alcohol, of albuminoids, and of sweets, lost twenty pounds in six months of following the prescribed diet. It may be added that, though the proportion of fatty matters was large, the diet altogether was little better than starvation fare.—*Brit. Med. Journal.*

SULPHO-CARBOLATE OF SODIUM IN VOMITING.—The use of the sulpho-carbolate of sodium, in flatulent dyspepsia is well known. It is not, perhaps, so generally known as a remedy for the vomiting of pregnancy. I have used it in this affection for years, and find it rarely fails to give some relief. I give it in doses of seven grains in half an ounce of water. Though sometimes decidedly useful in the vomiting of displaced or abnormal conditions of the uterus, it is less uniformly so than in pregnancy, probably because flatulence is a less constant factor in the former cases. Where deep nerve disturbance exists, we must trust to more powerful remedies, hypodermic morphia or atropine, or surgical procedures. The drug will, perhaps, be useful against sea-sickness, taken every two hours from the time of sailing. In one case—the only one tried—it appeared to have a good effect.—Philip Miall, in *Brit. Med. Journal.*

A NOVEL USE FOR PEPSIN.—Dr. Hollmann (*Nederland Weekblatt*, 18, p. 272), has used an aqueous solution of sixteen grains of pepsin as an injection into the bladder of a patient who had hæmaturia, and in whom a catheter failed to empty the bladder. A few hours later, a dark, viscid, fetid fluid readily escaped through the catheter.—*Medical Record.*

HYDROBROMATE OF IRON IN CHOREA.—A correspondent of the *LANCET* gives the following case: A patient, an anæmic badly nourished girl, aged fourteen, was frightened by a dog, and almost immediately afterwards developed choreiform movements. At the time of my visit, two days after the onset the child's contortions were painful to witness; her sleep was disturbed and it was with difficulty she could convey her food to her mouth. The heart sounds were normal, and there was no history of previous cardiac or rheumatic affections. After attending to her digestive organs, I prescribed syrup of hydrobromate of iron in twenty minim doses. The effect was very marked. The sedative action was speedily apparent, as the convulsive movements became gradually less severe, and the control of the muscles more readily recovered; whilst at the same time the anæmia was yielding to the accompanying iron. The continued use of the drug for about twenty days completely removed the affection.—*Med. and Surg. Reporter*.

THE TREATMENT OF ERYSIPELAS.—In the *Wiener Med. Presse*, Dr. Hastreiter recommends the treatment of erysipelas by painting with oil of turpentine, on the following grounds: 1. It can be used on the most sensitive patients, does not require any skill, and can be applied by the patient as often as may be necessary, and the irritation produced by excessive friction is avoided. During its application the eyes should be protected by a pad. 2. When employed frequently enough this method is perfectly safe and tends to produce a rapid cure. 3. Oil of turpentine can be procured everywhere. 4. All other dressings are unnecessary. 5. Internal antipyretic treatment is only rarely necessary; usually all that is necessary is to bathe the body with cold water, and make use of cold applications to the head. 6. The inhalation of the vapor of turpentine, can, perhaps, act as a preventive of the disease to the air-passages. 7. When employed at the outset of the disease it may abort the morbid process. 8. The oil of turpentine may also be employed in phlegmonous inflammation other than erysipelas.—*Med. Record*.

THE ETHER SPRAY AN IMMEDIATE CURE FOR NEURALGIA.—Dr. McColgan extols the value of the ether or rhigolene spray for the instantaneous relief principally of facial neuralgia. He first had occasion to observe its good effects upon his own person, he having suffered greatly from facial neuralgia. Since curing himself, he has had occasion to test its efficacy in about twenty cases. The result was invariably a most gratifying success. In many instances a permanent cure was established. He attempts to explain its action by supposing a complete change to take place in the nutrition of the affected nerve, in consequence of the intense cold acting as a revulsive.—*Boston Journal of Chemistry*.

COUGH OF PHTHISIS.—Dr. Alonzo Clark, in a recent clinical lecture, published in the *Medical and Surgical Reporter*, gives a very useful point in controlling the cough of phthisis, or at least bringing it within bounds. He directs that two grains of the extract of opium, which has been dissolved before, be dissolved in three ounces of water, and if desirable, a small quantity of glycerine may be added. The solution is to be placed in an atomizer. The spray is to be inhaled seven or eight times in succession, and repeated if necessary.—*Chicago Med. Review*.

ANTI-ASTHMATIC MIXTURE.—The *Four. de Med. et de Chirurg. Prat.* says that M. Huchard, of the Hospital Tenon, employs the following, especially when the symptoms of bronchial catarrh are added to the attack of asthma:—

R	Iodide of potassium.....	
	Tincture of lobelia.....	
	Tinct. polygala, of each....	10 parts
	Extract thebaic,.....	1-10 parts
	Distilled water.....	300 parts M.

A tablespoonful to be taken night and morning.

RESTORATION OF FROZEN PERSONS.—Some recent researches have very important bearing on the question of resuscitation of persons nearly moribund from freezing. Laptchinski (Knowledge) has made a series of very careful experiments upon dogs with the following results: "Of twenty animals treated by the method of gradual resuscitation in a cold room fourteen perished; of twenty placed at once in a warm apartment eight died; while of twenty immediately put into a hot bath all recovered."

HOW TO REMOVE FRECKLES.—D. J. V. Shoemaker, of Philadelphia, Pa., states that a careful application of a small piece of the ointment of the oleate of copper at night upon retiring will usually remove freckles. The oleate of copper ointment should be prepared by dissolving one drachm of the salt of oleate of copper in sufficient oleo-palmitic acid to make a soft ointment.

IN NERVOUS DEBILITY:—

R—Zinci Phosph.,.....	grs. 20-40
Acid Phosphor. dil.,.....	3 ss
Tr. Cinchon flav.,.....	3 vj
Aquæ Menth pip ad.,.....	3 viij

M. Sig. One sixth part three times a day.—*Med. Digest*.

"And Asa, in the thirty-ninth year of his reign, was diseased in his feet until the disease was exceedingly great; yet in his disease he sought not the Lord, but the physicians. And Asa slept with his fathers."—2 *Chronicles*, 16, 12.

THE CANADA LANCET.

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Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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OVERWORK AND UNDERWORK.

A few months ago Mr. Herbert Spencer, the philosopher and scientist, visited the United States, partly, at least, in quest of health and recreation. A living witness himself to the evils consequent upon overwork, he was probably in a frame of mind overly sensitive to impressions indicative of overwork on the part of the people amongst whom he sojourned. Be this as it may, certain it is that he deemed it right to sound a note of warning to the American people on this question before he took his departure. In a speech at Delmonico's, where he was dined by his admirers, he told Americans that they were overworked, and that in consequence, physical deterioration was clearly observable amongst them. An assertion more galling than this to the pride of a nation it would be difficult to conceive. Americans could stand to be told that they were an overworked people, but to be charged with physical degeneracy while believing themselves able to "whip all creation" is something past endurance. As might be expected, the English solon was told in a chorus reaching from the Atlantic to the Pacific that he was an ass, and did not know what he was talking about.

Fast on the heels of Mr. Spencer follows Mr. Seymour Haden, an English surgeon of some note, and the most famous etcher of his own times. He too has been feasted at Delmonico's. In his after-dinner speech he referred to Mr. Spencer's remarks. He flatly dissented from that gentleman's conclusions, and declared that the "energy" which he

found so much fault with was to him a source of much attraction, and could wish that they had a great deal more of it, on the other side of the Atlantic. Moreover, he declared that he "never had seen in all his professional career the least injury to life or health result from what Mr. Spencer calls overwork." To establish his position more firmly Mr. Haden adds, "I asked Sir William Gull if he had ever met with a case of mischief or injury from this cause, and he said he had not." For these generous words, Mr. Haden was praised as much as poor Mr. Spencer was abused. American manhood being thus vindicated, the sky is once more clear, and American "energies" move with unabated force in their wonted grooves.

Perhaps the most striking thing in this discussion is the wide divergence of opinion between these two observers. Mr. Spencer is convinced the American people are overworked—that they apply themselves too assiduously to business and the pursuit of wealth, and that in consequence of such intense application and continued strain, they are gradually undergoing a process of physical deterioration. On the other hand Mr. Haden has failed to discover any evidence of overwork. True, he has noticed remarkable "energy" in commercial and other pursuits, but of a kind so healthful in all respects, that he desires it to be transplanted to his own country. More remarkable still; he has never seen any ill effect consequent on overwork.

Mr. Spencer no doubt overshot the mark. He found himself amongst a people having distinctive physical qualities. He discovered that they had bodies cast in a somewhat different mould from that of a typical Englishman. It is evident he does not regard the new type an improvement on the old, since he speaks of it as a "deterioration." Seeking for the cause of this deterioration he fancied he had found it in overwork, it appearing to him that the whole people were intense toilers. A more absurd conclusion could hardly be imagined. In no country except our own, is food so abundant and labor so well rewarded. Living under circumstances so favorable to ease of both body and mind, the physical degeneracy of a people to any appreciable extent from overwork is simply an impossibility. In regard to the question of physical deterioration itself, there is perhaps more ground for Mr. Spencer to stand upon; at least the question may

have two sides. Deterioration, however, is a relative term, and to judge aright we require to have Mr. Spencer's standard of physical excellence. That standard no doubt is the English. But it should have occurred to him, that but few Americans are purely English or Anglo-Saxon stock. The Anglo-Saxon blood has been intermixed with Teutonic and other blood to an extent sufficient to produce distinctive mental and physical characteristics. To call contrasts *deterioration* is manifestly illogical and unjust. It may be that the article compared is better than the standard of comparison. In the present instance much that would be interesting might be said on both sides did space permit.

Equally unfortunate is Mr. Haden. That physician must be wanting in critical observation who has never met a case of ill health as the result of overwork. True, it has been said, that it is worry, and not work that kills. In a certain sense this is true, but what of the numerous instances in which worry, that is anxiety, is inseparable from the work? The truth is, every responsible position calling for the consistent exercise of mental rulings is a position of worry as well as work. In all the professions and in all callings imposing mental strain, are to be found individuals suffering from the effects of overwork, not in the United States only, but in all countries.

But what of the great army of underworked persons? In all rich countries are to be found two classes of men and women living in idleness. The first is the great horde of common vagabond idlers; the second, those who are cursed by lack of stimulus to labor, having enough and to spare. Are these free from bodily ailments, and are they physically the superiors of the overworked? Certainly not. As "the devil finds work for idle hands to do," so many of them fall into evil habits, contract disease and live out but half their days. The evils of overwork are but as a drop in the bucket compared with those following in the wake of underwork. In seeking for causes of physical deterioration, Mr. Spencer might have found in underwork a much more potent factor than overwork, not only in America but in all civilized countries.

Dr. Geo. Fox, the author of Fox's apparatus for fractured clavicle, died in Philadelphia on the 27th of December at the age of 77 years. He retired from practice 30 years ago.

HEALTH AND MORTUARY STATISTICS.

In pursuance of the resolutions adopted at Ottawa by the delegates from the various Boards of Health and municipalities in different parts of the Dominion, the Government has issued rules, regulations, and forms, for the collection of statistics of deaths and their causes. The rules are to apply to the following cities or towns, being the capitals of Canada and of the Provinces, and others having a population of 25,000 inhabitants or upwards, according to the census of 1880-81, Montreal, Toronto, Quebec, Halifax, Hamilton, Ottawa, St. John, N. B., Charlottetown, Winnipeg, Fredericton, and Victoria, B. C., to which neighboring localities may be added from time to time, or to such other cities, towns or localities or joint cities, towns, and localities whenever by experience it will appear that the system is satisfactorily worked and when sufficient means are granted by Parliament for that purpose. The rules are to be put into operation in each city whenever the Minister is satisfied of the existence of a local Board of Health to which is attached a permanent salaried medical officer, whether such "Board of Health" and "sanitary medical officer" are appointed and paid by the Corporation or by the Provincial Government; and on condition that the application of the system can be withdrawn for inability or negligence to carry it to such degree of accuracy as is necessary for the purpose intended. The Minister of Agriculture may make out of the Parliamentary grant an allotment equal to one cent for every individual unit of the population in favour of each of the cities to defray the expense of collecting mortuary statistics, to be paid by monthly instalments, or otherwise, and such allotment may be withdrawn in case of unsatisfactory working of the system. The Minister of Agriculture may, if he deems it necessary, add to such allotment for every one of the said citizens, a lump sum not to exceed four hundred dollars in any case, to assist the local authorities in procuring the necessary information of mortuary statistics. Pursuant to section 30th of "The Census and Statistics Act of 1879," the Governor-General in Council will, whenever one or more of the said cities have complied with the requirements hereinbefore stated, appoint the sanitary medical officer of the local Board of Health, a statistical officer for the collection of mortuary statis-

tics, from the local records, which appointment may be made to terminate for reason of unsatisfactory working of the system. The salary of the the statistical officer shall consist of 25 per cent. of all the sums allotted to the city for which he is appointed. In case of epidemics or endemics, or in the case of contagious or infectious diseases threatening or breaking out, the Minister of Agriculture may cause special investigations to be made in any locality by any or several of the statistical officers, and regulate and defray out of the Parliamentary grant the cost of such investigations. The Minister of Agriculture may request the statistical officer to supplement the numerical returns by such statements and information as relate to the various medical and other questions relevant to the subject of accidents, crimes, diseases, and public health as causes of deaths reported by the mortuary statistics. Forms are also given, under which the information is to be collected, embracing under proper headings the class, order and name of the disease, age, sex, nativity, and religion of the deceased, also forms of death certificate to be filled up by physicians.

PROFESSIONAL RESPONSIBILITIES.

At the recent sitting of the Civil Assizes in this city an action was brought by a man named Isaac Lumb, against a medical practitioner of this city for having, as he alleged, been criminally intimate with his wife. The doctor had attended Mrs. Lumb in a miscarriage which took place on the 26th of last June, and the plaintiff alleged that the act was committed on the 19th of July following while the doctor was treating his wife in his professional capacity, and that she had confessed her guilt to him the same day of the occurrence. The plaintiff estimated the damages at \$2000 for the loss of his wife's society and companionship through the trouble, although she still lived with him and took care of her four children. The plaintiff based his case on the evidence of his wife who swore that the doctor took improper liberties with her, and the evidence of one of the children, a lad of ten years of age, who swore that he looked through the opening between the folding doors and saw the doctor leaning over his mother, and heard his mother say, "what will my husband say."

On the part of the defendant evidence was produced to show that the folding doors could not have been open at the time, in fact had not been open for months. The wife's evidence was also shown to be contradictory in many important particulars. Medical evidence was also produced to show the improbability that the defendant had connection with her at the time mentioned, twenty-three days after the miscarriage. Witnesses also testified that the character of the plaintiff and his wife was such that they would not believe them on their oath. The judge charged strongly in favor of the defendant and pointed out that owing to a recent change in the law the evidence of a woman could now be taken in such cases as these, which opened the floodgates to unlimited blackmailing. The jury after an absence of less than ten minutes, returned into court with a verdict for the defendant.

The universal impression left upon the minds of all who were cognizant of the particulars is, that it is a clear case of attempted blackmailing, and we are very much pleased to observe the prompt and emphatic verdict given by the jury in the case. No member of the profession, however careful he may be, can successfully guard himself against such trumped up charges, and it is therefore gratifying to find public opinion so pronounced against such disreputable tactics. The medical practitioner in this case deserves the thanks of the entire profession for the firm stand he took in defending the case, and he and they are to be congratulated upon the result. Many a medical man from fear of publicity, and possible damage to his reputation, even though the charge could be easily disproved, would shrink from the task, and would willingly pay a considerable sum as hush money. It is a very great hardship that respectable practitioners in the ordinary discharge of their duties should be at the mercy of designing scoundrels, and it is also a most iniquitous thing that they should be compelled to pay all the expenses of the court while their false accusers go scot free.

The medical practitioner in question has received by letter and telegram the hearty congratulations of friends both within and without the profession upon the determination with which he confronted his false accusers, and also upon the successful issue of the case.

NATURE OF PUERPERAL SEPTICÆMIA.—Prof. Chauveau, of Lyons, has been making experimental enquiry recently, into the nature of puerperal septicæmia. He believes with Masini and Ferrari that the infective agent is a vesicular body, pyri-form and punctiform, constantly found in the blood of patients suffering from the disease, and is capable of reproduction in animals by inoculation, also that these organisms are common to all forms of septicæmia. Rabbits have been employed by Chauveau in his experiments, and he has succeeded by inoculation of the virus in producing every degree of puerperal septicæmia. If injected into the peritoneum, peritonitis is always present with much effusion, and death usually occurs in five or six days after inoculation. The effusion contains large numbers of the special micrococcus. A most curious fact was observed in the case of three rabbits which had recovered from the effects of inoculation. They acquired a perfect protection from the disease, had undergone as it were, a septicæmic vaccination and could not be successfully re-inoculated. Chauveau is now endeavoring to obtain a benign virus by Toussaint's method of attenuation by the action of heat, which might confer immunity without causing a dangerous illness.

MALARIA IN SKIN DISEASES.—In a paragraph in our Nov'r issue, copied from the *Michigan Med. News*, Dr. L. P. Vandell, of Louisville, is made to say that *all skin eruptions are due to malaria*. The Dr. sends us the following correction:—"From the criticisms which have been made on my views, I find that I have not succeeded in making myself perfectly understood. What I have contended for, and what I have reiterated, is simply this: Malaria is *the chief source* of acute skin disease. Scrofula is *the chief source* of chronic skin disease. The more inveterate cases of skin disease are often due to the co-existence of these two things. *I do not claim* that malaria and struma are the *sole* causes of the dermatoses. Indeed, *many* of the dermatoses may exist *independently* of malaria or struma, and most frequently some exciting cause is necessary to develop the cutaneous eruption. The proofs of the truth of my views are, in the first place, that the diseases of the skin are cured more certainly and more quickly by the anti-malarial remedies on the one hand, and by the anti-strumous on the other,

than can be done by any other line of therapeutics; and in the second place, that careful and painstaking investigation will, in the majority of dermatoses, make apparent the existence of the malaria or the struma, as the case may be.

CITY BOARD OF HEALTH.—It is a universal practice in cities of any pretensions whatever, to have on the health board a medical health officer. At one time Toronto had two such, one for the east and one for the west; now it has none, nor has it had any for many years past. Toronto has more medical practitioners in proportion to its population than any city we know of. The people support in a fairly liberal manner about 150 physicians to look after them when they get sick, from the many causes of disease which prevail in the city, and pay probably \$300,000 per annum to the doctors alone, to say nothing of nurses and other expenses, but not a dollar for the prevention of sickness. We fail to see the wisdom of the management of the health department in our city governmental affairs. It is not that we, or the doctors, should complain of this anomalous state of things; but we feel it to be our duty to endeavor to draw public attention to the facts. Much serious sickness and affliction could doubtless be prevented by an experienced, efficient, and well-paid medical health officer.

THE KINGSTON EMBROGLIO.—The *Canada Medical Record*, the Journal conducted by professors of Bishop's Medical College, has the following anent the recent trouble in the Kingston school. "The male students insisted that females should not be taught with them. The Faculty resisted the demand. The male students were equally determined and decided to leave the school in a body if their request was not granted. They telegraphed their situation to all the other Medical schools in Canada, some of which offered favorable terms. This brought the Faculty to a full realization of their position, and the flank movement of the students was successful. * * * Capital is being made of the fact that one school insisted upon the students at Kingston having their three months attendance certified before accepting them. This of course was simply refusing them, and Kingston has a right to feel grateful, but that does not prove that the other schools did wrong.

We believe each school knows best how to conduct its own business, and acted accordingly. It was this action which brought the Kingston Faculty to terms, and perhaps in the long run it may turn out that after all they caused the Royal College of Physicians and Surgeons to act in a way that will redound to their best advantage."

TRINITY MEDICAL COLLEGE.—The increasing attendance of students in Trinity Medical College has rendered imperative the building of another wing to the new lecture hall and dissecting room. The work will commence immediately after the close of the present winter session. 201 students have registered their names in the Faculty of medicine during the present session, and it is confidently expected that this number will be greatly increased next session. This is the largest attendance in the history of the college and the largest of any medical school in Canada either past or present.

Shortly before the Christmas holidays Professor Kirkland, delivered a lecture to the students on "The Story of the World." The lecture was highly appreciated, and at its close the students presented the lecturer with a handsome and costly gold-headed cane. The address was read by Mr. Fere, and the presentation made by Mr. H. S. Bingham in behalf of the students. Mr. Kirkland made a suitable reply, and the proceedings closed by the students singing "Old Trinity is a Jolly Home."

APPOINTMENTS.—The following gentlemen have been appointed Examiners in Medicine, Toronto University—Physiology and Pathology—George Wilkins, M.D. Medicine and Therapeutics—F. R. Eccles, M.D. Midwifery and Forensic Medicine—D. B. Fraser, M.B. Anatomy—M. H. Aikins, B.A., M.D. Surgery and Surgical Anatomy—F. L. Grasett, M.B. Clinical Medicine and Clinical Surgery—C. O'Reilly, M.D. Hygiene and Medical Psychology—C. W. Covernton, M.D. Chemistry—W. H. Ellis, M.A., M.B. Biology—H. Montgomery, M.A.

The following have been appointed examiners in Medicine in the University of Trinity College: Geo. T. McKeough, M.D., Chatham—Surgery and Botany. Wm. T. Harris, M.D., Brantford—Midwifery and Medical Jurisprudence. W. T. Stuart, M.D.—Chemistry. C. Sheard, M.D.—Anatomy

and Physiology. C. W. Covernton, M.D.—Medicine and Materia Medica.

Dr. W. H. Howey, of Delhi, has been appointed assistant surgeon on the eastern division of the Canada Pacific Railway.

Dr. R. Whiteford has been appointed Prof. of Physical Diagnosis and Diseases of the chest in the Toledo Medical College.

Prof. Bardon Sanderson, of University College, London, has been elected to the Waynflete chair of Physiology at Oxford.

BATHURST AND RIDEAU MEDICAL ASSOCIATION. A meeting of the Bathurst and Rideau Medical Association was held in Ottawa, on the 18th ult. The attendance of members was large, and after a lengthy discussion a resolution thanking the Ontario Government for important measures recently adopted by them in relation to public health was unanimously adopted. The President, Dr. Cranston, Arnprior, delivered the opening address, and papers were read by Dr. Cranston, on "*Fractures*," Dr. Grant on "*Effusions in Pleura*," Dr. Horsey on "*Counter Irritation*," and Dr. Baird on "*Hematuria*." Lengthy discussions followed each paper. In the evening the city physicians entertained their visiting brethren at dinner in the Royal Exchange. The following are the officers of the association: President—Dr. Cranston, Arnprior. Vice-Presidents—Drs. Horsey, Ottawa, and Burns, Almonte; Treasurer—Dr. Hill, Ottawa; Secretary—Dr. Small, Ottawa; Council—Drs. Baird, Pakenham; Groves, Carp; Dickson, Pembroke; Preston, Carleton Place; Lynch, Almonte; McCallum, Smith's Falls; Sweetland, Grant and H. P. Wright, Ottawa.

THE UNITED STATES DISPENSATORY.—We are pleased to announce that the fifteenth edition of this famous American medical work will be ready this month. The editors are Dr. H. C. Wood, Professor of Materia Medica and Therapeutics in the University of Pennsylvania, Joseph P. Remington, Professor of Pharmacy, and Samuel P. Sessler, Professor of Chemistry, in the College of Pharmacy of Philadelphia. The revision has occupied about three years, and has been in all respects most thorough and complete, embracing the most recent discoveries in Materia Medica, Pharmacy, Chemistry and Therapeutics.

The relation of the work to the United States Pharmacopœia will be fully maintained, whilst the encyclopædic character of the Dispensatory will be developed to the greatest extent. The new Pharmacopœia will be in all its parts fully expounded and discussed, and the most recent non-official medicines, as well as those long out of date, will be carefully considered in the second part of the work.

PREVENTION OF BLINDNESS.—The fifth International Congress of Hygiene, which will meet in Hague, Holland, in 1884, will award the prize of two thousand francs (£80 sterling), offered by the London Society for the prevention of blindness, to the author of the best essay on "the causes of blindness and the practical means of preventing it." Besides this prize, the International Society for the improvement of the condition of the blind, reserves to itself the right to award a second prize of one thousand francs, or two prizes of five hundred francs each, and a medal with a diploma, to such of the essays as shall be deserving of it. The essays are to be sent to Dr. Haltenhoff, Geneva, not later than the 31st of March, 1884, each bearing a motto, and the name and address of the author to be enclosed in a sealed envelope.

JOURNALISTIC CHANGES.—The *Michigan Medical News* and the *Detroit Clinic* have been consolidated, and the new journal is called "*The Medical Age*." The *Canadian Journal of Medical Science* has dropped its high sounding title and has been re-christened the *Canadian Practitioner*. The *American Medical Bi-Weekly* has become a weekly. The *N. Y. Medical Journal* has also become a weekly, and both the latter, and the *Medical Record* of New York have greatly enlarged the size of their pages. We cannot say that we fully appreciate this change. If it is well to lengthen the pages to a foot or more, why not make them two feet, so that when bound up the volumes may stand on the floor, for no ordinary book-shelf will accommodate them.

CANADIAN VOLUNTEER SURGEONS.—During the engagement of the British forces in Egypt, Dr. J. Wishart, of London, Ont., and Dr. D. B. Fraser, of Stratford, (Graduates of Trinity Medical College,) offered their services to the British Govern-

ment, as army surgeons. The following reply was received through the Acting Governor-General.

To the Deputy Governor-General of Canada :

SIR,—I have received a letter from Drs. Wisart & Fraser, of Canada, offering their services with the medical staff doing duty in Egypt. The Secretary of State for War, to whom the letter was referred, desires that these gentlemen may be thanked for their offer, and informed that there will be no opportunity of utilizing their services.

I have, etc.,

(Signed), KIMBERLEY.

DEFECTIVE VITAL STATISTICS.—At the recent meeting of the public health delegates at Ottawa, Dr. Playter drew attention to the fact, that the interments in the cemeteries in and around Toronto, showed that there were, during the months of September, October and November, of this year, 39 more deaths in Toronto than were recorded with the City Registrar. There is evidently something faulty either in the system or in the manner in which it is worked. It has now been in operation over thirteen years, long enough to have had a fair trial.

REMOVALS.—Dr. Jas. Cassels has removed from Three Rivers to Upper Bedford, Que. Dr. H. E. Poole has removed to Ormstown, Que. Dr. K. A. J. McKenzie has removed to Portland, Oregon. Dr. H. V. Ogden has removed to Milwaukee, Wis. Dr. J. C. Shanks has removed to Howick, Que. Dr. H. E. Heyd, formerly of Brantford, has removed to Buffalo. Dr. F. H. Mitchell has commenced practice in Winnipeg. Dr. J. C. Moody, of Richibucto has removed to Windsor, N. S. Dr. F. Hoyl (Kingston) is practicing in Ada, Minnesota. Dr. M. Forster has removed from Acton to Palmerston, Ont.

REMOVAL OF THE GALL-BLADDER.—Prof. Langenbeck of Berlin, (*Klin. Wochen*) has recently removed the gall-bladder for the relief of a chronic case of gall stones. An incision was made along the outer border of the right rectus muscle and another at right angles to it, corresponding with the inferior border of the liver. The abdomen was opened, a ligature put on the cystic duct and the gall bladder dissected out. The patient made an uninterrupted recovery.

NEW TREATMENT OF FIBROIDS OF THE UTERUS.

—Mr. Knowsley Thornton, of the Samaritan Hospital, London, Eng., has successfully ligated the uterine and ovarian arteries in cases of fibroids of the uterus. The results are reported to have been excellent, and promise completely to supplant hysterectomy. We are reminded that Dr. Cattermole of London, Ont. suggested this operation in certain forms of utero-ovarian tumors in the CANADA LANCET for Nov. 1880. It is somewhat gratifying to learn that a suggestion emanating from one of our distinguished Canadian confrères has been successfully carried into effect.

PRESENTATION.—Dr. Coventry was the recipient a few evenings ago of a very flattering address, a beautiful silver tea service, and a purse of \$450 in gold, from the good people of Windsor Ont., as a token of their appreciation of his public services as Mayor during the past three years. The Dr. acknowledged the compliment in appropriate terms. We congratulate him upon the event, and the kind and appreciative regard in which he is held by his fellow-townsmen,

BISHOP'S MEDICAL COLLEGE ANNUAL DINNER.

—The students of Bishop's Medical College held their second annual dinner at the Windsor Hotel, Montreal, on the 13th of December. Both this dinner and the one held on the 18th of the same month by McGill College, like those in Toronto, were conducted on strictly temperance principles. The dinner was in every sense an unqualified success. Besides students, graduates, professors, and representatives of other colleges, the Consul-General of the United States, and many prominent citizens were present.

ONTARIO BOARD OF HEALTH.—We are pleased to notice that the Provincial Government has placed the sum of \$4,400 in the estimates for the salaries and expenses of the Board of Health. This will enable the Government not only to increase the salary of the Secretary so as to permit him to devote his whole time to sanitary work; but also to give a *per diem* allowance to the members of the Board.

PETERBORO' WATER WORKS.—The system of Waterworks just completed by the Waterworks Co. in the enterprising town of Peterboro' has

been tested and promises complete success. Dr. R. A. Boucher has taken an active interest in securing an abundant supply of good water for the people of this town, and he is to be congratulated, and also the inhabitants of Peterboro' on the success of their undertaking.

HORSFORD'S ACID PHOSPHATE IN NIGHT SWEATS.

—Dr. J. J. Douglass, of Hampton, Nebr., says: He has used Horsford's acid phosphate extensively in his practice and it gives almost universal satisfaction. He recommends it in the first stages of consumption, night sweats, prostration from over work, wakefulness, nervous exhaustion, alcoholism, sick headache, loss of appetite, and constipation.

The following medical gentlemen have been appointed commissioners under the license act of 1876: Jas. S. Sprague, M.D., and John S. Loomis, M.D., Hastings, (N. R.); A. Rockwell, M.D., Hastings, (W. R.); L. Harvey, M.D., Lambton, (E. R.); A. McLean, M.D., Lambton, (W. R.); J. Gunn, M.D., Middlesex, (N. R.); C. M. Gould, M.D., Northumberland, (E. R.); W. McGill, M.D., Ontario, (S. R.); and W. H. Blackstock, M.D., Simcoe, (E. R.); R. Douglass, M.D., Bruce (N. R.); A. Robillard, M.D., Ottawa.

BRITISH DIPLOMAS.—Dr. M. L. Cameron, of Chatham, has recently returned from Edinburgh where he has been pursuing his medical studies for some time past. He has received the L. R. C. P. and S. Edin. W. C. Cousins, M. D., of Montreal, has received the double qualification, L. R. C. P. and S. Edin.

PARLIAMENTARY.—We are pleased to observe that the following medical gentlemen have been re-nominated as candidates for the Ontario Legislature viz: Drs. Widdifield, Robertson and Cascadene. It is also rumoured that Dr. McMillan, of Alexandria, Ont., and Dr. Louis Robitaille, of New Carlisle, Que., have been called to the Senate of the Dominion of Canada.

CORONER.—P. A. McDonald M. D. has been appointed Coroner for the Co. of Inverness, N. S., and also Health Officer for Port Hawkesbury, Nova Scotia.

The death of Dr. Geo. M. Beard, of New York, of pleuro-pneumonia aged 44 years is announced.

Books and Pamphlets.

"THE POPULAR SCIENCE MONTHLY" for January, 1883. New York: D. Appleton & Co. Fifty cents per number, \$5 per year.

This popular monthly offers a goodly number of articles which merit attention for their interesting practical character. The opening article is on "The Great Comet of 1882," by Professor Young, of Princeton, who discusses the subject from a scientific point of view. "Scientific Philanthropy," by M. Fouillée, is discussed in the light of the views of the Darwinian school of philosophy. Dr. C. C. Abbott's "Traces of a Pre-Indian People" is another interesting subject. Dr. Robert's "Bodily Deformities in Girlhood" commends itself by its very title to parents and teachers. Dr. Felix I. Oswald writes on the "Curiosities of Superstition." Herbert Spencer's speech, at the farewell banquet given him on the 9th November, is published under the title of "The Gospel of Recreation." This number also contains the portrait and sketch of the late Dr. Henry Draper.

A PRACTICAL TREATISE ON THE APPLICATIONS OF ELECTRICITY TO MEDICINE AND SURGERY; By Roberts Bartholow, A.M., M.D., LL.D. Second edition, enlarged and improved, with 109 illustrations. Philadelphia: H. C. Lea's, Son & Co. Toronto: Ure & Co. Price, \$2.50.

It is only a short time since we reviewed the first edition of this work. The fact that another edition is already demanded shows that the work was appreciated by those for whom it was intended. The author states in the first edition that the work was an exposition of electricity for remedial purposes made by a medical practitioner, for the use of other medical practitioners—in other words to prepare a work from the practitioner's, rather than the merely scientific, stand point. The same conception is paramount in the present edition, but the author has developed more fully the modern methods of ascertaining and expressing current strength, tension, resistance, etc. He has made many additions and improvements in the work, which has enlarged it by the addition of about 30 pages. The author is too well known to require any recommendation at our hands.

MEDICAL CHARTS.—Complete epitome of skin diseases, and chart of poisons. By J. E. Sanborn, M.D., Rockford, Mass.

The author has compiled for the use of physicians, two very useful publications, in the form of medical charts; one, a complete epitome of skin diseases, based upon the most approved classification. It is neatly printed on a single sheet, (22 by 28 inches) and gives at one view the symptoms, varieties, causes, diagnosis, prognosis and treatment of every skin disease, carefully compiled from the best authors, and brought up to the latest times; adapted both for speedy reference and permanent use. It is, in fact, a condensed treatise on skin diseases. Price 35 cents. The chart of poisons, gives in tabular form the symptoms of all poisons, with antidotes, and full treatment. Price 25 cents, or both charts 50 cents.

The "CANADIAN ILLUSTRATED NEWS," published by G. B. Burland, Montreal.

The number for January appears with a new heading and much improved in form. The paper and letter press are good, and the illustrations very interesting and well executed. It contains an interesting variety of well written articles and stories, and deserves the hearty support of the reading public of Canada. We earnestly commend it to the attention of our readers.

Births, Marriages and Deaths.

On the 6th of December 1882, by the Rev. C. Watson. G. L. Milne, M. D., C. M., to Ellen Kinsman, daughter of John Kinsman Esq., all of Victoria, B. C.

At Shakespeare on the 27th of Dec. 1882, W. T. Parke M. D., of Milverton Ont., to Miss Kate Fraser, daughter of the late Alex. Fraser of North East Hope.

At Picton, N. S., on the 20th of December, Thomas R. Fraser, M. D., late of Halifax, in his 74th year.

On the 31st of December, Dr. Robt. Thomson, of St. Stephen, N. B.

In Winnipeg Man, on the 30th of December, 1882, Dr. Duncan McGregor formerly of Chatsworth, Ont.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

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CRITICISM AND NEWS.

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Original Communications.

A NEW MEDICAL BATTERY.

BY A. M. ROSEBRUGH, M.D., TORONTO, ONT.

About two years ago I read a paper before the Toronto Medical Society on the construction of galvanic and faradic batteries, which paper was subsequently published in the *Canada Lancet*. Since then a new departure has been made in the construction of portable galvanic and portable faradic batteries, as well as in the instruments where the two are combined. But perfection has not yet been attained; the model battery has yet to be produced. Medical batteries, though highly finished—even ornamental—are still too complicated and too difficult to be kept in working order, and withal too expensive, to become popular with the profession. We are not all practical electricians, and we require a battery that is simple in its construction, almost automatic in its action, and easily kept in order. As a contribution to this end, I propose to describe a modification of the portable galvano-faradic battery which I have recently adopted with advantage, and to which I wish to call the attention of the profession.

These improvements are two-fold—

1st. In the method of securing the necessary pressure on the hydrostat plate or plates.

2nd. In the method of putting the battery into action and out of action.

This battery was made for me in Toronto, and is a modification of the battery invented by Dr. McIntosh, of Chicago. In the McIntosh battery the horizontal plate to which the elements are attached is padded on the under side to form a hydrostat plate, one-half of which is used to cover the acid-cells when the battery is not in action, while the elements, attached to the remaining half,

are suspended in a drip-cup by the side of said acid-cells. The end of each hydrostat plate is pressed down upon the cells by means of spring bolts and clamping screws. This latter arrangement is quite effective but very inconvenient, as much time is spent in clamping and unclamping the plates—not merely when the battery is taken to the bedside of the patient, but also of necessity whenever the battery is used. In the new battery the pressure upon the hydrostat plates is made automatic by simply placing bearings upon the lid of the battery case. When the lid is closed the acid-cells are firmly covered, and when the lid is open the bearings are removed and the plates may be moved without loss of time. Again, in the McIntosh battery, when the apparatus is used each hydrostat plate (with the elements attached) is raised from the drip-cup, rotated upon its horizontal axis, and the elements immersed in the acid solution. When the *séance* is ended, each hydrostat plate is lifted from the fluid, and, before it can be replaced in the drip-cup, must again be rotated upon its horizontal axis. This manipulation is not specially inconvenient, but unfortunately the dripping of the acid solution from the zinc and carbon elements commences before the horizontal rotation is completed, and, unless very special care is taken, the metal parts on contiguous plates are liable to become spattered. This is obviated by the expedient illustrated in the accompanying figures.

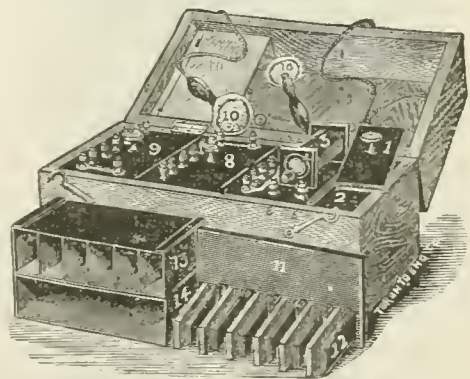


FIG. 1.—The elements at rest. 7, S, 9. The three hydrostat plates in position. 2 The extra space to the right for overlapping of the first hydrostat plate (containing the induction coil.)

FIG. 1 represents the position of the hydrostat plates of an eighteen-cell combined galvano-faradic battery when the elements are at rest. The elements from 1 to 18 are resting in the drip-cups, six

pairs being attached to each of the four hydrostat plates, and on the left hand side thereof. The overlapping part of each hydrostat plate covers the top of six acid cells, which latter are to the right of each drip cup. In the McIntosh battery the elements of any one series, as from 7 to 12, can be immersed in two ways: first, by lifting and then rotating on the horizontal axis, and second by allowing the projecting hydrostat plate to override the screw-cup, on the adjoining plate to the right (1 to 6). Both methods are objectionable, the latter obviously so, and the former for reasons already named.

In the apparatus as modified by me the battery-case is elongated to the right, to the extent of half the width of a hydrostat plate, so as to provide a space for overlapping to that extent. When the elements of the first series (1 to 6) are immersed, space is left for the overlapping of the hydrostat plate of the second series, which, in turn, makes way for the third, and so on. When the third series of elements are immersed, the end drip-cup to the left is left uncovered. This may be covered by the narrow plate or cover removed from the right, as represented in Fig. 2.

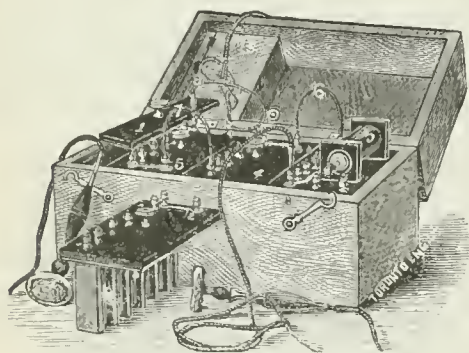


FIG. 2.—The elements immersed. 6. Spring-wire connecting the 1st and 2nd series of elements. 7. Spring-wire connecting 2nd and 3rd series. 1. The cover for the space left to the left of the case when the elements are immersed.

The screw-cups 6 and $6\frac{1}{2}$ of the first and second series, and 12 and $12\frac{1}{2}$ of the second and third series, are connected by a spring or wire, this connection being facilitated by the supplemental posts $6\frac{1}{2}$ and $12\frac{1}{2}$. The positive electrode is connected with No. 1, and the negative with No. 18. The cord of the negative electrode is bifurcated, so that, by a step by step arrangement, the number of

elements in circuit may be increased or diminished gradually without breaking the circuit.

By these modifications the battery is ready for use as soon as the lid is open. The elements may be displaced to the right and back again to the left without loss of time and without being rotated: and, moreover, in the original battery, any one of the zinc or carbon plates may be easily removed, repaired, or replaced without the help of an electrician.

To sum up, the advantages claimed for the new battery are as follows: 1, cleanliness; 2, economy of time; 3, simplicity in management; 4, simplicity of construction.

BRIEF DIRECTIONS FOR OPERATING THE BATTERY.

The Acid Solution. — Bisulphate of mercury ziv. ; bicromate of potash (pulverized) ziii. ; sulphuric acid (pure) ziv. ; water zxxx. It should stand two or three hours to cool, before using. The cells should be filled a little more than half full. The mercury bi-sulphate keeps the zinc plates amalgamated, and prevents them from corroding. After using the battery, say 12 or 15 times, a little fresh battery solution may be added, but the cells should not be filled more than two-thirds full; it is well to keep a supply of the solution ready prepared. After using the faradic current 8 or 10 times the weakened solution may be withdrawn from No. 1 cell, with a syringe, and a fresh solution substituted.

The Hydrostat. — The battery is constructed so that when the case is closed and locked, pressure is exerted upon the soft rubber hydrostat pad (14 Fig 1,) and the acid solution is kept from spilling. The top of the cells should be perfectly even, and nothing should be allowed to accumulate on top or underneath them, or on the bottom of the box. In case of a long journey it is well to make the hydrostat doubly secure by increasing the pressure. This can be done by inserting 1, 2, or more thicknesses of blotting paper under the cells on the bottom of the box. Special care should be taken that the empty or drip cells (14) do not stand higher than the cells containing the acid solution, (13,) they might be a trifle lower. Moist sponges should be kept outside the case and the case should always be kept in an upright position.

To Test the Strength. — When the solution is fresh any single cell will cause the spring of the

induction coil to vibrate when it is connected with the primary coil at B and P (below No. 1). Simply connecting B with No. 1 post by the wire coil, will test the strength of No. 1 cell, and connecting B with No. 2 post will give the strength of No. 1 and No. 2 together. To test the strength of No. 2 cell separately, the two covered electrode cords are used; one is inserted in B post and the other in P (below No. 1 post), one of the tips of the free ends is inserted in No. 1 post and the other in No. 2 post. By removing the tip from No. 1 post and inserting in No. 3 post—No. 3 cell is tested, and so on. If the second series of plates (7 to 12) are immersed in the acid solution the individual



FIG. 3. The faradic coil. B the battery post for one end of spring wire. The other end of wire is inserted in 1 or 2 post. S, the posts for the secondary or induced current.

cells may be tested in the same manner. No. 8 cell is tested by inserting one of the free tips in No. 7 post and the other in No. 8, and so on. To prevent confusion in this test, it is well to have one of the branches of the bifurcated cord eliminated, as for instance, by tying it up in a knot.

After the cells have been used 10 or 12 times for 10 or 15 minutes at a time, the strength will be reduced so that it may require the current from two cells to operate the vibrator. When the strength of the solution is so reduced that two or 3 cells will not affect the induction coil, the battery should be charged with a fresh solution. A weak solution cannot be depended upon. The point of the screw should just touch the platinum projection on the vibrator, and the hammer on the end of the vibrator should stand about $\frac{1}{2}$ of an inch from the end of the core of the induction coil. It is sometimes necessary to start the vibrator with the finger. The elements should not remain in the solution longer than necessary. After being used they should be rinsed, but they should not remain long in water. The drip cups should be emptied occasionally.

In testing the strength of the faradic current it is sufficient to connect the cords [to N and P (secondary)] and take a moistened electrode in each hand. The strength of the faradic current is increased by withdrawing the tube from the core of the induction coil, (and between the two secondary posts N. and P.)

The strength of the galvanic current (constant current) is roughly tested by applying the two electrodes to the forehead an inch or two apart. Six cells should cause a burning sensation, and a flash of light when one electrode is removed. A galvanometer is more accurate.

The weakest faradic or induced current is derived from P.P.N.,—the strong from N.^SP.

THE NEW YORK MEDICAL CODE.—The members of the State Medical Society at Albany, by a vote of 105 to 99 have approved the new code of ethics by which allopathic physicians are allowed to consult with any legally qualified practitioner. The closeness of the vote, however, indicates how strong a feeling exists against the change among the conservative members of the profession; but when the new code has been in force longer, its opponents probably will be more reconciled to it.

NOTES OF A CASE OF SEVERE RAILWAY INJURY.

BY J. F. MACDONALD, M. D., HOPEWELL, N. S.

(Reported by Mr. I. M. Maclean)

On the ninth of August last, C. B., æt. 58, while employed with his fellow workmen on the Railroad track, was struck down by an approaching engine, the wheels of which passed over his left leg above the ankle, so severely lacerating the soft parts and crushing the bones as to necessitate amputation three inches below the knee. Some projecting part of the engine entered the perineum, severed the sphincter ani, injured the os pubis and, making its way to the bladder, produced a ragged wound in the neck of that viscus, of fully an inch in length, through which the urine constantly found an exit.

The amputation was performed as soon as possible after the accident, and the perineal wound thoroughly cleansed and dressed anti-septically. Owing to the peculiar situation and the severity of the perineal wound, the introduction of a catheter

was found to be impracticable for the first five or six days, and, as a consequence, the continuous dribbling of urine rendered a very frequent renewal of the dressing necessary. Even after the successful passing of the instrument, the flow of urine did not entirely cease, this being sufficiently accounted for, by the size of the laceration in the neck of the bladder and by the frequent plugging of the catheter with mucus, &c., which prevented its being retained for any great length of time. The instrument required to be changed very often. The perineal wound at each dressing, and the bladder (*per cath.*) once or twice daily, were well washed out with carbolic acid lotion.

The great difficulty experienced in keeping the patient dry and clean, the presence of some severe bedsores which the greatest care did not succeed in preventing, and the trying influence of the hot summer weather aggravated in no small degree, the condition of matters for the first few weeks.

Aug. 9th.—11 p. m. (the night after the accident). Pulse 89, temp. normal. Skin moist. Aug. 11th.—Morning—Pulse 80, temp. 100°. Evening—pulse 92, temp. 100-4°. Aug. 12th.—Morning—pulse 75, temp. 100°. Evening—pulse 92, temp. 99°. Aug. 13.—Morning—pulse 76, temp. 100-5°. Evening—pulse 78, temp. 99°.

Aug. 15th.—Catheter passed and temporarily retained. Pulse and temp. normal. Hot weather oppressive and patient manifests considerable uneasiness and distress. Perineal wound painful.

Aug. 19th.—Morning—pulse 65, temp. 99-8°. Evening—pulse 72, temp. 100-8°. General condition good.

Aug. 20th.—Pulse and temp. normal. The painful condition of the perineum, the necessity of frequent dressings, the warm weather and presence of some bed sores, interfere with rest at night, necessitating, occasionally, hypodermic injections of morphia, or sleeping draughts.

Aug. 21st.—A drowsy or semi-comatose condition all afternoon.

Aug. 22nd.—Morning—drowsy condition passed away. Patient doing well. Pulse and temp. normal. In the evening, a good deal of fever. Pulse 90 and temp. 102-5°. No rigors.

Aug. 23rd.—Morning—Fever gone. Pulse and temp. normal. Evening—slightly febrile. Pulse 84 and temp. 100°. Stump doing so far well. It and the perineal wound are being regularly dressed with carbolized oil.

Aug. 24th.—Morning—pulse 82, temp. 100-4°; scrotum, &c., considerably œdematous. A quantity of fluid evacuated by incision. Evening—pulse and temp. normal. Aug. 25th.—General condition good.

Aug. 26th.—Seventen days after the accident, the stump having firmly healed, except where the ligatures protruded, secondary hemorrhage occurred, which was controlled by compression and cold applications.

Aug. 27th.—Evening—pulse 82, temp. 100-4°. Stump discharging a large quantity of purulent matter mixed with blood clot, odor offensive. Daily syringing of the stump with carbolic lotion. Urine flowing *per cath.* Very little through wound.

Aug. 29th.—Patient doing well. Considerable discharge from stump and perineum. Ligatures have all come away.

Aug. 31st.—Stump has healed firmly with the exception of one opening to admit of drainage. A few drops of urine *per viâ nat.* without aid of catheter.

Sept. 1st.—Some fever last night. Slight delirium. Sleepy and semi-comatose all afternoon. Evening—pulse 82, temp. 100-4°. Very restless.

Sept. 3rd.—Small quantity of urine *per via nat.* Patient now able to sit on a chair for a short time daily.

Sept. 5th.—Urine again coming through the wound. In the evening severe chills followed by slight fever.

Sept. 6th.—Morning—pulse 93, temp. 102-8°. Evening—condition improved. Pulse 79, temp. 99-8°. No symptoms of pyæmia. No recurrence of last evening's chill. Passed two or three cupfuls of urine *per via nat.* None from the wound.

Sept. 8th.—Sleepy and drowsy. Stump still discharging. On examination, the end of the tibia was found slightly necrosed.

Sept. 9th.—Urine flowing through the wound. Purulent discharge from stump continuing. Stimulating injections applied two or three times daily to the end of the bone. Patient still in a drowsy condition.

Sept. 10th.—Chilliness complained of. No definite rigor. Drowsiness passing off.

Sept. 11th.—Some urine still dribbling from wound. Pulse and temp. normal.

Sept. 17th.—Urine has ceased coming through the wound. Stump doing well. No trouble from the bone.

Sept 19th.—Stump completely healed. The perineal wound progressing favorably but slowly.

Sept. 29th.—Catheter permanently removed. No more urine coming through the wound.

Oct. 9th.—An abscess, which formed behind the scrotum, was opened.

Oct. 25th.—Perineal wound re-opened, and, on examination, the os pubis was found necrosed at the part where it had been injured. This portion of the bone was found completely divested of periosteum. There was a considerable discharge of thin watery pus, and several pieces of bone came away, one of which, although thin, was as large as the nail of the little finger. The abscess in the groin was found to be in connection with the necrosed piece of bone. The fluid injected through the opening in the abscess made its way out by the perineal wound and *vice versa*.

Jan'y. 23rd.—The patient has been slowly but steadily improving; the abscess in the groin has healed; the perineal wound and the part of the os pubis which had necrosed give no further trouble and he is now almost well.

ON CONTAGIOUS PNEUMONIA.

BY G. E. COULTHARD, M. D., FREDERICTON, N. B.

I have been much interested in reading in *Braithwaite's Retrospect*, Vol. 84, p. 229, and Vol. 85, p. 84, of several cases of contagious pneumonia, so-called, and would like to give my experience with what seems to be the same disease, in the hope that the attention of your many readers may be called to cases that may have occurred to them:—

On Sunday, January 7th, at noon, I saw for the first time E. O. L., a stout, fleshy, well-developed woman, æt 73, the wife of a farmer in comfortable circumstances. On Wednesday, January 3rd, at 6 p. m., after doing a "moderate washing," she was seized with severe pains in the right side, attended with frequent annoying cough and chills. She went to bed, and kept getting worse, the cough being associated with a rusty viscid expectoration, the heat of the body increased, and the respiration hurried and at times difficult and painful. She kept constantly getting weaker. On Sunday, the 7th, the clergyman of the parish saw her, and advised her husband to secure medical aid at once.

When I arrived I found her propped up in bed, face dusky, features pinched, anxious, and wearing an expression of pain. Resp. rapid, about 40; temp. 103°, pulse 136, rapid, weak, intermittent, and shuffling. On physical examination, whole back of right chest was dull on percussion and respiration bronchial. Ordered stimulants freely, and beef essence, cataplasms over affected lung. Saw her again the following morning and found her in a state of collapse, and death took place at 4:40 p. m.

On the following day (Tuesday), early in the afternoon, her husband, æt 73, a rugged old man, whose life had been a continuously healthy one, was taken with sharp pains beneath lowermost part of sternum—cough and sense of chilliness. I saw him at 7 p. m., and found him sitting up in an easy chair, face flushed, and skin of forehead and neck and conjunctivæ of yellowish hue, breathing hurried, about 36 per minute, pulse 120—not very strong. He complained of the sub-sternal pain and excessive weakness. The cough was slight, with no expectoration. On physical examination, found slight crepitation in the lower part of the right lung posteriorly—no other physical signs. I ordered him to bed, and prescribed diaphoretics, cough mixture, quinine, stimulants with concentrated nourishment, and a mustard cataplasm to be applied. Saw him the following evening, when he reported himself better. The improvement, however, was imaginary and arose from the excitement attending the removal of his wife's remains. The crepitation in the right lung had extended. Resp. was broncho-vesicular, 40; temp., 104°; pulse, 130; fuller and stronger than the day previous. The jaundiced hue was deeper; the face more dusky; the countenance more anxious. The cough was worse, and the expectoration rusty and viscid. Saw him on Thursday, and on Friday, the disease still keeping on unchecked, the pulse growing weaker, and the lung continuing a course toward complete consolidation. On Saturday morning he was in a state of collapse, and realized that the end was fast approaching. He died the following morning.

Here, we have the history of two cases of lung inflammation in the same house, pursuing a very similar course, and each terminating fatally—the one within six days of the other. Both persons were rugged and healthy; and though 73 years of

age, time did not bear heavily upon them. There was nothing in the location or surroundings to suggest a septic influence at work. A granddaughter, 8 years old, was the only other occupant in the house. I cannot conceive that the sickness and death of the husband was a mere coincidence. Following so closely upon that of the wife there must have been some contagious or infectious agent in the case, and no other solution appears clearer to me than this: That from the breath or expectoration of the wife, as she was tenderly cared for by the husband alone during the first three days of her illness some noxious principle gained entrance to his system, setting up the train of symptoms described.

SYMPATHETIC DISEASE OF THE EYE.*

BY W. F. COLEMAN, M.D., M.R.C.S.E., ST. JOHN, N.B.

Mr. President and Gentlemen,—He who does not think his subject of paramount importance is not in a fit frame of mind to address his hearers. So possibly, to claim their attention, he not seldom assumes the virtue of believing the subject under consideration of the greatest consequence for weal or woe that ever occupied the mind of man. Without announcement you shall be the judges whether sympathetic inflammation of the eye (which so often implies total blindness and all it entails) be of consequence—yet it would be neither advantageous nor becoming to occupy much of your time. While so many granaries of individual experience are collected under one roof, I shall be very sadly disappointed if many are not unlocked to contribute some of their seed-grain for the crop of universal knowledge. Let me say plainly, if in spite of an opportunity to contribute to our necessity, all the grain is mistakingly withheld for your own bread, or delusively held to raise the price of corn, you deserve the misery of the miser, and with an apology to the brokers for the comparison you are as bad as they.

The causes, nature, symptoms and treatment of sympathetic inflammation of the eye receiving a meagre place in the text books on general surgery, may be sufficient excuse for citing the views of some special writers; while some brief statement

of my own experience and opinions seems to me in keeping with the object of this meeting.—Unfortunately the nomenclature of diseases of the eye, in common with other diseases, is often confusing, e. g., sympathetic ophthalmia, ophthalmitis and inflammation are generally used synonymously, while others divide sympathetic ophthalmia into two forms, i. e., sympathetic irritation and sympathetic inflammation. So excellent and usually accurate a writer as Mr. Lawson, at first confuses sympathetic irritation with inflammation, and then by his own defining shows how they differ in kind. He says: "Symp. ophthalmia is a peculiar *inflammation* (sympathetic) of one eye, excited by some special irritation in the other." Again: "there are two forms of symp. ophthalmia, 1st. symp. irritation; 2nd. symp. inflammation: which is equal to saying: symp. inflammation has two forms, 1st. symp. irritation; 2nd. symp. inflammation. Now the objection that irritation is not a form of inflammation is a vital one by Mr. Lawson's own showing when he so well defines how irritation lacks the conditions of inflammation, and refers to the curability of the former thus: "Although the eye may be subjected to frequent attacks (of irritation) yet no fibrinous effusion nor disorganizing changes take place and the excision of the lost eye at once arrests the disease. All sympathetic irritation ceases when the cause which gave rise to it is removed." In fact some writers maintain that this form of irritation (sympathetic) is a neurosis which never passes over to inflammation. Admitting (with most authorities) sympathetic irritation to be a premonitory stage of sympathetic inflammation is not a concession of their identity or similarity. It might be best to limit the word ophthalmia to inflammation which it usually implies, and to include under sympathetic affection, sympathetic irritation and sympathetic inflammation. The latter usually appears as a plastic inflammation of the iris and ciliary body—the early stage of the irido-cyclitis is marked by increased tension of the eye, and later in severe cases the pupil is blocked with lymph, cataract forms and the eye atrophies.

The usual causes of sympathetic disease are wounds of the eye, particularly in the region of the ciliary body, that is within a belt of the sclera $\frac{1}{8}$ in. in width surrounding the cornea; the irritation of foreign bodies in the globe; and of degenera-

*Read before the New Brunswick Medical Society, July 18th, 1832.

tive changes which occur in lost eyes. Although the path by which the disease travels from the injured or exciting eye to the sound one, and the character of the traveller are not accurately determined, the way is most probably from the injured iris and ciliary body through the ciliary nerves to the iris and ciliary body of the sound eye; the enemy appearing in some cases in the guise of inflammation of the ciliary nerves, in others in the form of a nervous irritation reflected through the nervous centres upon the vaso-motor nerves of the iris and ciliary body.

The most characteristic symptom of sympathetic irritation is weakened accommodation, so that the patient holds the book far away, and reading near is painful or impossible. The eye avoids light and waters if exposed to it or much used. Sympathetic inflammation very rarely begins in less than three weeks after injury of the exciting eye, generally in two or three months, and may occur at any time after during the whole life. Wells records a case so late as twenty-six years after injury, in which a piece of metal was found lodged in the detached retina. The attack of inflammation usually begins with symptoms of irritation, or, as some believe, may set in without any warning. The latter mode I have never seen. In advanced stages there are usually symptoms of plastic iritis, cyclitis and chorioiditis, viz.: pericorneal injection, discolored iris, a pupil irregularly dilated by atropine, pain, impaired vision, and tenderness upon pressure at the margin of the cornea. Mild cases may do well but in the majority blindness is the result. The condition of the injured eye which from first to last is a standing menace to the sound one, is cyclitis, the pathognomonic symptom of which is tenderness upon pressure at the margin of the cornea and especially above.

If in any case it is right to formulate a universal rule as to treatment, this I think is applicable to injured eyes: Advise the removal at once of every eye in which the sight is lost from injury in the ciliary region, and every eye lost, from any cause in which the ciliary region is tender, in order to avoid the risk of a disease so fatal to vision as sympathetic inflammation. Whether it is useful to remove the offending lost eye after a sympathetic inflammation has been set up in its fellow, authorities do not agree. Carter says: "I have never seen any evidence of benefit from enucleation if

sympathetic ophthalmia is once set up. My own experience has been, in nearly all cases, the very opposite, and speaking from memory, out of fifteen to twenty cases of sympathetic disease I do not remember a case (with two or three exceptions) that was not benefited more or less, and some very much by enucleation. Dr. Wecker, than whom I know not a better authority on "Ocular Therapeutics," writes: "In all cases where an eye has been the cause of sympathetic ophthalmia and is itself hopelessly lost, it must be removed at once in order to allow of any hope of success in the treatment of its fellow. Any halting between two opinions as to whether some other mode of treatment would not be as well, or as to whether some operation might not be substituted for enucleation, or any misgiving that enucleation, if practiced during the active period of an inflammation, may aggravate the symptoms is in such a case disastrous beyond measure. Enucleation followed up by energetic treatment, such as hyd. perchlor., potass. iod. and pilocarpine may still yield most satisfactory results." If a patient presents himself in whom a wound of one eye has induced sympathetic disease, and the wounded eye preserves the better vision of the two or even less than its fellow, the question of treatment is often a very puzzling one. Considering a traumatic inflammation much less malignant than a sympathetic, and therefore much more likely to yield to treatment, my own practice has been not to enucleate, and it has not been regretted, for the injured eyes have made fair recoveries. It may be urged that the sympathetic eye would have improved more with enucleation, but that being sometimes doubtful, it seems to me better to give the patient the benefit of the double chance of two eyes by not enucleating. Having drawn your attention to some of the salient points of the subject, others may be mentioned while relating a few illustrative cases.

CASE I.—Ann R. æt. 49, colored, consulted me at the St. John General Hospital in July '81, and reported that twelve years ago the right eye was struck by a bone; for three months after the injury the eye pained severely and then became quite blind. There has not been pain since, except occasionally during the past four weeks. The left eye for the past three months has been sensitive to light, waters, and does not see so well either near or at

a distance ; vision left eye is 1-5. There is peri-corneal injection.

Present state of right eye : ball atrophied to $\frac{2}{3}$; ciliary tenderness above cornea ; bony degeneration of choroid. Treatment—Right eye enucleated ; vitreous is found to be replaced by bone.

Aug. 1st.—Left eye ; no peri-corneal injection or photophobia ; lachrymation less ; vision the same = 1-5.

CASE II.—June 26th, '81 ; H.P. æt. 42, farmer ; says his left eye was lost six years ago by the blow of a hammer. It pained more or less for three years after the injury, but not any for the past three years. The right eye gave him no trouble till three months ago, when it got red and painful ; the sight began to fail and has gradually grown worse.

Present state of left eye : shrunk to half size, and somewhat tender over upper ciliary region. Right eye—general epi-scleral lilac-colored injection, cornea hazy, iris discolored, pupil very irregular. After atropine, upper ciliary region tender ; vision = $\frac{1}{3}$.

Diagnosis—Keratitis and Uveitis.

Treatment—Enucleation of the left eye, and atropiæ grs. iv. ad. $\frac{3}{4}$ in right eye four times daily, R. pil. hyd. grs. ijss.

June 28th—Can see better ; vision = $\frac{1}{3}$; cups applied to right temple.

June 30th—Four days after enucleation, vision increased to $\frac{1}{2}$ and cornea clearing.

July 8th—Vision increased to $\frac{1}{2}$; no pain, and cornea much clearer.

CASE III.—J. H. D., æt. 34, barrister, consulted me July 2nd, '81. The left eye was lost in infancy and is now $\frac{2}{3}$ the size of normal ball ; the cornea is replaced by opaque fibrous tissue excepting a central calcareous spot ; there is moderate tenderness of the upper ciliary region, but the shrunken eye has never been painful. The right eye was healthy till fifteen years ago, when for a week it was red and the sight impaired. Four years ago it had a similar, but much severer attack, the eye was very painful and bloodshot. Twenty months ago had a third similar attack which lasted a week. For a long time there have been frequently days when he could not read with any comfort, and for the past year the eye has watered very much when exposed to the wind.

Present state of right eye : Vision = $\frac{1}{4}$ = reading

No. 4 Jaeger, Hus. = $\frac{1}{8}$. Dots of uveal pigment on lens-capsule (the sequelæ of old iritis). A few floating bodies in the vitreous ; the disc is so blurred as scarcely to be distinguished from the surrounding retina (the result of optic neuritis). Enucleation was advised and was performed four days after. A bony mass half the size of a marble occupied the vitreous space.

July 11th—Five days after the operation the right eye feels much stronger than before the operation ; vision the same.

August 31st—Patient writes, "the eye is much stronger, vision is better, and there has been no relapse of weakness of eye since the operation." He has gained six pounds in flesh.

Query—Was the optic neuritis in this case, transmitted from an optic neuritis in the exciting eye, or was it secondary to sympathetic iritis ?

REMARKS—In cases I. and III. bony degeneration of the choroid was the probable exciting cause of the sympathetic disease. In cases I. II. III. sympathetic disease set in, twelve, six and fifteen years after injury in first two, and loss of eye in case III. respectively. In case I. the eye improved after enucleation but vision remained the same. In case II. an enucleation during sympathetic irido-cyclitis, arrested the disease of the eye, and vision was much improved while the patient remained under observation. He has not since been heard from. In case III. vision and the condition of the sympathetic eye improved after enucleation.

Optico-ciliary neurotomy, (an operation performed by division of the optic nerve and denuding the posterior surface of the eye-ball) has not been so fortunate in its results, as to take the place of enucleation in sympathetic disease. The optic nerve has been known to re-unite after division, and frequently the ciliary nerves have re-united and sensibility of cornea returned with sympathetic disease of fellow eye. I will conclude with the indications for enucleation :

1. An eye lost from injury or otherwise may be removed to prevent sympathetic disease, or may not be according to the intelligence of the patient. May not be if the patient will observe and report himself upon approach of sympathetic irritation.

2. The lost or seriously injured eye must be removed when sympathetic irritation (only) is excited in fellow eye.

3. When sympathetic irido-cyclitis has occurred

It is an open question whether enucleation is beneficial. If the offending eye is lost I would enucleate, if it has vision most men object to operation.

4. In sympathetic serous iritis experience has pretty well established (Machews) that enucleation converts a curable disease into a malignant iridocyclitis.

Correspondence.

INTEGRITY MEDICAL AID FUND.

To the Editor of THE CANADA LANCET.

SIR,—Your attention and that of your medical *confrères* is respectfully drawn to a circular which has been recently issued by a "medical syndicate" in this city. The circular referred to is not the work of novices. All are not young and inexperienced fledglings, and time alone will prove the fatuity of their efforts to obtain popularity and wealth in the path they have chosen. I will give a few cases as an illustration. A member of the "medical syndicate" had been attending a family and receiving his regular fee as his visits were made. Unknown to the doctor the head of the family had joined the "institution." The doctor's services were called on again and after due attendance he presented his bill. Judge of his disgust when his patient retaliated with his little *card* showing that he was entitled to the doctor's services and medicine at the rate of *one cent per day*. Medico No. 1 "left," and No. 2 had to attend as per circular. To show the Company's politeness and courtesy to outsiders, I may mention a case in which one of our prominent medical men was brought in contact with one of them. Dr. A. was called in and prescribed for a child taken suddenly ill, and went his way to other urgent cases. A few hours afterwards he called again and found a Company man in attendance and in the act of prescribing. The Company man was asked what he was doing there. He replied that he was not aware that any other doctor had the case in hand, although there were some of the doctor's bottles before him on the table at which he was writing his prescription. On being challenged he backed out in a very clumsy and half inarticulate way. In the meantime he had prophesied the immediate death of the child, who is yet alive and well. If this is

the way the noble "twelve apostles" are going to work, what about our code of medical ethics? These so-called medical experts, like Drs. K. & K., are trying to cut up the field of honorable, gentlemanly and intelligent practitioners, but fortunately the common sense of a discerning public will in the end oppose them. We have too many of these "Institutions" in our midst. All are arrant humbugs. It is deeply to be deplored that these "excrescences" are growing in our midst, and that the practice of medicine, to a certain extent, is being dragged down gradually from its high and noble position. They require a vigorous roasting and will eventually become annihilated. The "Integrity Medical Aid Fund Company" are advertising for agents. I can recommend one whom I know will suit the organization perfectly. I allude to a detective of the "Society for the Prevention of Cruelty to Animals," well known as the "little man with frogs all over his coat." He will make a capital collector for the *one-cent-a-day-dodge* business. He can also stand between the "Integrity Medical Aid Fund Society" and their victims, in his official capacity as detective of the "Society for the Prevention of Cruelty to Animals."

With reference to the above let me quote the following excerpt on "The duties of the Physician," from the issue of your valuable journal for January last:—"Art is long, time is short, opportunity fleeting, experience deceptive and judgment difficult," such were the serious reflections of the Father of Medicine after he had labored with the problems many years and accomplished more than perhaps any man who has practiced the healing art. In those days when so many doctors may be found who are little better than professional loafers, so many who discourage the reading of medical works, who express their contempt for original research and scoff at medical journals; regarding the accumulation of money as the only test of professional success, and who depend on their own personal shrewdness and gullibility of the people at large to excuse the title under which they thrive the following relative to the life of Dr. Geo. B. Winston, from the *St. Louis Courier of Medicine* is refreshing—"A friend once remarked to him, 'Doctor, what necessity is there for ceaseless labor and study at your time of life?' With a look of astonishment, never to be forgotten, he replied, 'my dear sir, I am under bonds to do it. When

I offered my services to this community there was an implied covenant on my part that, so far as God gave me strength and ability, I would use them for gathering up and digesting all that has been said or written in regard to the diseases to which the human flesh is heir; and if I should lose a patient because of my ignorance of the latest and best experience of others in the treatment of a given case, a just God would hold me responsible for the loss, through inexcusable ignorance, of a precious human life, and punish me accordingly; and whenever I get my consent to be content with present professional attainments, and trust my own personal experience for success, I will withdraw from practice and step from under a weight of honorable obligations, which, with my best endeavors to meet them honestly and conscientiously, are still sometimes almost heavier than I can bear."

Yours, &c.,

PRACTITIONER.

Reports of Societies.

HURON MEDICAL ASSOCIATION.

A meeting of the above association was held in Clinton on Tuesday, the 9th of January, 1883, when the following officers were elected for the present year. Dr. Hurlburt, of Brucefield, President; Dr. Williams, of Clinton, Vice-President; Dr. Graham of Brussels, Secretary-Treasurer.

Dr. Sloan, of Blyth, read a report of 11 cases of "Diphtheria," occurring during the recent epidemic in this district. His internal treatment consisted mainly in the old combination of tr. ferri mur. and potassæ chlor. He applied generally twice a day to the membrane, tincture ferri mur. sulphurous acid, carbolic acid and glycerine, and also very frequently salicylic acid and alum in solution. He also lays great stress on pencilling the membrane very thoroughly with the latter solution by means of a brush, so as to remove as much of it as possible, leaving less for absorption, which he claims is an important factor in increasing the virulence of the disease.

The paper brought out lively criticism and discussion, in which Drs. Worthington, Holmes, Williams, Sloan, and Graham took part.

Dr. Worthington, of Clinton, read an interesting report of gangrene in the roof of the mouth, resulting fatally in a child eight months old.

Dr. Graham, of Brussels, showed some instructive microscopical specimens, amongst which were the "Bacillus Anthracis," from a case of "splenic fever," spurious melanosis of the lung, and a section of epithelioma of the clitoris obtained from a patient shown at last meeting.

TORONTO MEDICAL SOCIETY.

Nov. 2nd, 1882.

The President, Dr. George Wright, in the Chair.

Dr. H. C. Burritt was elected a member.

Dr. Graham showed the case of tinea kerion reported by him at last meeting. Much improvement had taken place under treatment by sulphurous acid bathing, followed by applications of iodide of sulphur ointment. Syr. ferri iodidi was given internally.

Dr. Cameron said that he had found, in a case of tinea capitis, the application of sulphurous acid, followed by glycerine and carbolic acid fail to destroy the parasite, while the sulphurous acid alone succeeded perfectly.

Dr. Canniff reported a case of placenta prævia with hemorrhage which occurred suddenly on rising from tea. Digital examination discovered the placenta to the right of the os uteri. Labor pains came on at midnight, and delivery followed in due course, without a recurrence of the hemorrhage.

Dr. Cameron said he lately had a case under his care which simulated placenta prævia. The woman rose at night to urinate, and half a chamberful of blood was passed. Examination failed to discover any evidence of placental presentation. Delivery took place next morning without any untoward symptoms. Dr. Cameron then read a very practical and exhaustive paper upon fractures of the os innominatum.

Dr. A. H. Wright said that most of the cases he had seen were the result of railway and other injuries of a severe character, and usually terminated fatally. He believed that fracture of this bone often passed unrecognized. In his own case, lately reported, though the bone was broken into many pieces, only fracture of the ramus was discovered with certainty, and yet if the spine had not been injured the girl would probably have recovered. He thought the treatment should be rest in the most comfortable position.

Dr. Nevitt asked if any further evidence existed to support the statement of Dr. Neill, of Philadel-

phia, that callus is deposited only on the outer surface of this bone during union after fracture.

Dr. Cameron said the statement was based on the condition found in Neill's Cabinet specimens, and he knew of no corroborative evidence save that furnished by analogy, that in other flat bones callus is often found only on the external surface.

Dr. McFarlane reported a case of fracture extending across the face, caused by impaction between the floor and a descending elevator in a warehouse in this city. The alveolar processes and hard palate were moveable *en masse*. Favourable progress has been made in the case, the parts being simply maintained in position by a bandage passed under the chin, as is done in fracture of the lower jaw.

On motion, a committee consisting of Drs. Workman, Nevitt and McPhedran was appointed to report on the expediency of establishing, under the auspices of this society, a directory for nurses.

Nov. 16th, 1882.

The President, Dr. George Wright, in the Chair.

Dr. Cameron showed a part of the ileum from a woman who died from bowel obstruction, symptoms of which existed for a week prior to death. She had a small femoral hernia, which was soft, dull and reducible within the saphenous opening, but not within the abdominal cavity. It was evidently omental and had no bearing on the symptoms present. There was severe pain in the epigastric region; vomiting was persistent, becoming stercoraceous 12 hours before death. The symptoms not improving, the hernia was explored and found to be omental as anticipated. It was adherent, but there was no inflammatory trouble present.

P. M.—Pyloric orifice of the stomach contracted from a deposit, possibly syphilitic. The last few inches of the ileum were much contracted, so much so that water could scarcely be forced through it. The caput coli was much distended with fluid fæces. There was another constriction at the sigmoid flexure.

Dr. Cameron also showed the larynx and trachea from a woman, between 30 and 40 years of age, who died in the General Hospital. She was syphilitic. For about ten weeks she suffered from laryngeal trouble, expectorating pus and blood. Dyspnoea was severe at times, but in the intervals the breathing was easy. Anti-syphilitic and seda-

tive treatment mitigated the symptoms, but in one of the attacks of dyspnoea she died suddenly from suffocation. Tracheotomy had been decided on the day before death, but was postponed in order that the students might be present to witness the operation.

P. M.—A carious cavity full of pus was found in the posterior part of the larynx, the cricoid cartilage being the seat of the disease. There were also a few ulcerated patches in the trachea.

Dr. Nevitt showed a ruptured stomach from a man injured by a piece of wood thrown back from a saw against which he was holding it. The accident occurred shortly after dinner. He was able to walk from the conveyance in which he was taken home to the house. The pain was severe; no vomiting; could take a full inspiration. There was retention of urine. During the night the pain became diffuse and evidence of general peritonitis developed. At 8 o'clock next morning he asked for a drink of water, sat up to drink, and then fell back dead.

P. M.—Much gas in the peritoneal cavity, slight exudation on peritoneum. A rent one inch long in anterior wall of stomach near the pyloric end; this was under the seat of injury. The posterior wall was absorbed. Some extravasation behind peritoneum.

Dr. Geo. Wright showed part of the spine from a man who was injured on the railway. There was a good deal of shock. The lower extremities were partially paralyzed; the paralysis became complete a few hours after the injury. The bladder was also paralyzed, and consequently there was retention of urine. Death took place suddenly next morning.

P. M.—There was great infiltration of the soft tissues about the seat of injury and of the psoæ muscles. The spinous processes of the 10th, 11th and 12th dorsal vertebræ were fractured, as well as the laminæ, and the spinal cord was lacerated.

The report of the committee appointed at last meeting was read and adopted, recommending the establishment of a directory for nurses, and suggesting a plan for giving effect to the report.

January 11th, 1883.

Dr. W. J. Wilson, 2nd Vice-President in the chair.

After routine business Dr. Graham showed part of the ileum from a patient who died of enteric

fever at the end of the third week. Symptoms of perforation occurred 48 hours before death. The *post mortem* showed a large quantity of the contents of the bowels in the peritoneal cavity. There were several large perforations in the lower part of the ileum, one near the ileo-cæcal valve was about $1\frac{1}{2}$ inches long, and occupied nearly half the circumference of the bowel. Several small perforations existed higher up. Attention was drawn to the great length of time the patient survived the symptoms of perforation. Dr. Graham also showed a heart with greatly dilated right ventricle from a man who died in the Toronto General Hospital the day following his admission. The right side of heart was greatly dilated and probably caused tricuspid incompetence. An ante-mortem clot extended into the pulmonary artery. Left ventricle greatly hypertrophied. There was no pigmentation of the liver, a rare condition with dilated right ventricle, and probably accounted for on the supposition that the dilatation was of recent development, being due to the fatty degeneration of the walls of the ventricle, which was very marked. According to Balfour the bruits heard in anæmia are due to temporary dilatation. There was fatty degeneration of the liver and kidneys also.

Dr. Cassidy reported a case of death with symptoms of perforation in enteric fever, but had not the specimen to present. The symptoms showed themselves on the 21st day, and death occurred on the fourth day following. The *post mortem* showed a localized peritonitis of about the size of the hand, confined to the bowel. The effusion was scanty. The last ten inches of the ileum was dark, but no perforation could be found until the bowel was opened, when a small one was discovered. It was completely glued over by the exudation.

Dr. McPhedran referred to a new physical sign of perforation, recently brought to the notice of the profession by Dr. Flint, of New York, namely, that with the escape of gas into the abdominal cavity hepatic flatness is always replaced by tympanitic resonance, owing to the fact that gas in the peritoneal cavity (the patient lying on the back) will separate the anterior surface of the liver from the thoracic wall. This sign has been verified by Dr. Flint in the *cadaver*, by injecting air into the peritoneal cavity; and he also relates some cases affording clinical evidence of a negative character in support of the same. While assuming that

hepatic flatness is proof against perforation of the alimentary canal, it cannot be assumed that tympanitic resonance over the hepatic region is always due to perforation. Hepatic tympanitic resonance may also arise from each of the two following conditions, namely: *First*, by separation of the liver from the anterior thoracic wall by the colon having been forced up between them, and *secondly*, by the conduction upwards to the pulmonary region of the tympanitic resonance of the transverse colon when it is greatly distended by gas. If the sign is found upon further investigation to be reliable, these two possible conditions giving rise to hepatic tympanitic resonance will have little if any effect on the value of the sign. Dr. Flint submits his views to the profession, with the desire that others may test the value of his physical sign.

Dr. Canniff thought that in certain conditions of the system gas might be produced in the peritoneal cavity.

Dr. Nevitt reported three cases of enteric fever in which there was prolonged illness. One was marked by fluctuations of temperature ranging from normal to 104° . They all made good recoveries. The President thought there had been a marked tendency to prolonged attacks of enteric fever during the last season.

Dr. Graham thought the nomenclature required alteration. At present all fevers characterized by continued high temperature were classed as enteric. He would make two divisions of them, namely: (1) Enteric to include all cases with typical symptoms. (2) Continued fever to include the ill-defined cases.

Dr. Canniff reported a case of traumatic inflammation of the knee, met with in Muskoka last summer during a holiday trip. The man was injured in the knee by an axe, the patella being almost completely divided, the femur cut into, and the cavity of the joint evidently opened. Severe arthritis followed. A good recovery has resulted under treatment by extension, cleanliness and plenty of fresh air. He is unable to bend the knee, and passive motion was advised, with the hope of overcoming the ankylosis.

Dr. Macdonald reported a case of hydrarthrosis of the knee, which he is treating by injections of solution of tincture of iodine (5ij. *ad* 3j.) after removing most of the fluid in the joint by aspiration. The patient had taste of iodine in the mouth

a few minutes after the injection. The immediate effect of the treatment was to cause much swelling of the knee, but this began to abate in a few days, and the joint returned to its normal size. The ultimate results remain yet to be seen.

Dr. Graham said he had a similar case about a year ago with Dr. Armstrong, of this city. One drachm of tincture of iodine was injected. Both knees were treated and are now well. Other joints became affected subsequently. The iodine taste was present in this case also.

Dr. McPhedran reported a case of trouble in Scarpa's triangle, characterized by excessive pain and tenderness, slight swelling, but no other evidence of inflammation. The limb was extended, and flexion gave great pain. There was no history of injury nor evidence of any rupture of any of the soft tissues. If the bursa beneath the psoas were the seat of trouble there would have been flexion of the limb. Complete recovery resulted in about three weeks.

Dr. Rosebrugh then exhibited his modification of the McIntosh battery, galvanic and faradic combined, and gave a detailed description of it, which will be found in another column.

January 25, 1883.

The President, Dr. George Wright, in the chair. Dr. Mackenzie, Riverside, was elected a member.

Dr. Graham exhibited a placenta containing two cysts filled with dark brownish fluid. The case was premature.

Dr. Cameron showed for Dr. Harrison of Cambridge, an acephalous monster. There was *no neck*, and the spine was bifid throughout the dorsal and cervical regions. Birth was given to a similar monster in pregnancy previous to this one.

Dr. McPhedran showed a diffuent spleen taken from an old man who died in the House of Providence. There was marked chronic gastritis, and all the organs, especially the heart, were very friable.

Dr. Cassidy then read a paper on "Ruptured Perineum." He dealt with the subject exhaustively, relating cases in his own practice in illustration. He advocated very strongly, immediate operation in all cases. He preferred keeping the bowels loose, and urged the necessity of keeping the parts scrupulously clean by the vaginal douche. A prolonged discussion followed, in which nearly all the members present took part.

MEDICO-CHIRURGICAL SOCIETY OF WINNIPEG.

A meeting of the medical profession, of Winnipeg, was held on the 10th ult., in response to a circular issued by Dr. Whiteford, for the purpose of forming a medical society in that city. The following gentlemen were present:—Drs. Codd, Thibodo, Patterson, Munroe, McAdam, Blanchard, Minaker, Sutherland, Jackes, Brett, Seymour, Covernton, Turnbull, Jones, Kerr, Gray, Jamieson, McEachran, Mewburn, Phillips, A. H. Ferguson, McDiarmid and Whiteford. Dr. Codd occupied the chair, and Dr. Mewburn acted as Secretary.

The following officers were elected:—President, Dr. Lynch; First *Vice-do*, Dr. Whiteford; Second *Vice-do*, Dr. Codd; Sec'y-Treas., Dr. Covernton; Members of Council, Drs. O'Donnell, Patterson, Jackes, Brett, Phillips and Kerr.

In the absence of Dr. Lynch, the 1st Vice-President, Dr. Whiteford, took the chair. He thanked the members present for the honor they had done him in electing him First Vice-President, and was glad to see such a large number present at the first meeting, which augured well for the future of the society. He was glad to feel that his efforts in getting the medical men together had met with such a hearty response, and he hoped that in 1884 the Canada Medical Association, sending delegates from all parts of the Dominion, would meet in Winnipeg. He had been informed that it was the intention to do so, and it was pleasing to think that there would be a medical society to receive them. He suggested that the rules and regulations of other similar societies be obtained and submitted to the Committee, and that a meeting be called at an early date to discuss them.

Dr. Jackes suggested that the meetings be called twice a month, but the majority present seemed in favor of meeting once a month for the present. The association then adjourned.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Canada Lancet.)

The regular quarterly meeting of the Michigan State Board of Health was held in Lansing, Mich., on the 9th of January, 1883.

The subject of oil inspection was brought up, as it was alleged that much oil is being sold without being inspected. Dr. Hazlewood and Dr. Baker

were appointed a committee to take such action as was considered necessary on the subject.

The secretary made his report of work during the last quarter, mentioning the efforts to prevent the introduction of contagious disease by immigrants; the distribution of blanks and circulars to officers of local boards of health; the general distribution of the Annual Report of the Board for 1881; the issuing of a circular with a view to collecting facts respecting the cause and spread of diphtheria; the preparations for a sanitary convention at Pontiac, &c., &c. The following resolutions were passed:—

Resolved,—That the State Board of Health urgently requests our members of Congress to endeavor to secure the passage of a bill to appropriate \$25,000 for the remainder of this fiscal year and thereafter at about the same rate, to enable the National Board of Health to co-operate with State and local boards of health and quarantines in efforts to prevent the introduction of contagious diseases into the United States, and their spread from one State to another.

The invitation to hold a sanitary convention at Reed City some time in the spring was accepted.

Analyses of apple-butter and of the tinned-copper such as is used to make wash-boilers, were presented. The apple-butter is often made in such "copper" boilers when they are new. The acid of the fruit attacks the tin which often contains lead in dangerous quantities, and it is said that the tin lining is eaten off in one or two times using for making apple butter. The analysis of the apple butter showed distinct traces of lead and tin and a faint trace of copper. The ordinary clothes-boiler such as used in our kitchens, if made of this tinned-copper would have $2\frac{1}{3}$ ounces of metallic lead on its surface, an amount that must have a serious influence on persons who eat acid fruits and juices boiled in such vessels.

The subject of requiring burial permits, and thus securing mortuary statistics, before removal of the body of deceased persons, was referred to the committee on legislation, with the request to prepare a bill and submit it to the legislature.

The American Public Health Association has recommended making it a penal offense to communicate a contagious disease. The committee on legislation was requested to modify the bill so as to name diphtheria, scarlet fever, and small-pox, and get the subject before the legislature.

At a meeting of the Board, held at Pontiac, Mich., Feb. 1st, 1883, the following resolution, relative to the National Board of Health, was adopted:—

Resolved,—That we consider it of the highest national importance, as also of great importance to this State, that the National Board of Health shall receive annually an appropriation sufficient to enable it to carry on the important work of protecting the country from the introduction of contagious diseases; of collecting and distributing for the guidance of State and local boards of health, information relative to the prevalence of diseases, and particularly of contagious diseases: of investigating by specially qualified experts the obscure causes of diseases, and of publishing to the world the results of its studies and investigations, more especially concerning diseases, which, like diphtheria and small-pox, spread generally throughout the country.

Selected Articles.

THE "COAT SLEEVE" METHOD OF AMPUTATION.

BY R. DAVY, M.B., F.R.C.S., WESTMINSTER HOSPITAL.

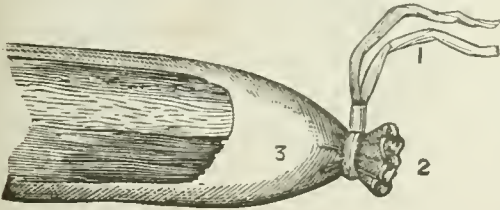
In practice, there are accidents and diseases which yet call for the necessity of amputations; and I wish to-day to bring before your notice a method of performing these operations which I have already carried out on three occasions—viz., one amputation of the thigh and two of the leg. For brevity's sake, I will style this method *the coat-sleeve*; and this name has been chosen because my left coat-sleeve has illustrated this procedure to my class, and gives a good idea of the operation. Cheselden (1720), of the Westminster Hospital, originally advocated the circular plan of amputation, which, according to Syme, was modified by Mr. Mynors of Birmingham; and this circular method has held its ground as a standard procedure; but I think good reason may be given for advocating still further modifications in this amputation.

Let me first describe the details of the *coat-sleeve* operation, and next point out the advantages that, in my opinion, result from it.

Carry in your minds the essentials of a circular amputation (a very good account of this circular method is given in William Hey's *Surgery* (1814, page 526); and you will see that the *coat-sleeve* method is but a modification of a very old operation. Let me insist on the formation of a long integumentary sleeve, from three or four to six inches; and that your dissection should be directed so as to separate the superficial from the deep

fascia; and very much of this dissection is accomplished by firm traction of the skin towards the trunk of the patient, assisted by slight drawings of the knife on attachments. I have frequently, on the dead body, invaginated skin on skin, as the cut end of the finger of a glove may be turned over the kid on the finger; and on the living patient this is necessary, so as to gain sufficient length of skin-cylinder from its end to the point at which division of the bone takes place. I would impress on you not only the importance of making a far greater allowance for retraction of skin in planning an amputation, but also the comparative uselessness of any other structure than skin for making an efficient and lasting pad for the end of the bone. It is the skin, fat, and hypertrophied sub-structure that give a good cushion; and with stumps, as well as ordinary seats, when once the leather has given way, the so-called stuffing soon wears, and bare boards and bare bone shortly show themselves. The tuber ischii, knee, elbow, and heel are good illustrations of these points.

Having dissected your skin-sleeve accurately, and divided all the structures down to the periosteum, carefully peel this membrane upwards to the point at which the saw is to be applied, and shelter the soft structures from the stroke of the saw by means of a slit bandage, retracted by an assistant; and, within reasonable limits, the smaller the saw is, the easier is the division of bone effected. Next, trim your stump (*i. e.*, cut off with scissors any projecting tendon or nerve), and tie or twist the bleeding vessels. Then tie up the skin-sleeve (3) with a piece of tape (1) passed through a cylinder, as shown in the diagram allowing the ligatures (if



any) to hang through the crucial slit at the face of the stump. Treat your wound either with or without dressings—I much prefer none; and carefully watch that no undue strangulation of the “off-end” (2) of the skin-sleeve occurs. Should the stump become cedematous, or any necessity for drainage arise, insert a drainage-tube into the centre of the face of the stump, of sufficient firmness to prevent a too ready collapse of its walls (*e.g.*, a piece of gum-elastic catheter), and allow the excretion to flow into a pledget of marine tow or some absorbent material. As yet I have not had occasion to resort to any artificial drainage. The wound cicatrizes up to one-half or one-fourth of an inch; and a central button of depressed scar-tis-

sue results, surrounded by soft, fatty skin-cushions, plaited in a radiating manner from the centre to the circumference of the face of the stump. This method of amputation is applicable to any part of the extremities, in those cases where the surgeon has the opportunity of selecting the precise point of removal, and where the adjoining skin is sound. In my own experience, the middle of the leg, where the muscles of the calf swell, is about as difficult a situation as any for carrying out the dissection of a long sleeve.

CASE I.—J. C., aged 6, was admitted on many occasions into Mark Ward, suffering from recurrent acute attacks of synovitis of the right knee-joint. He was admitted on the last occasion on December 2nd, 1880. On March 8th, 1881, finding the boy was steadily becoming worse, and sinuses multiplying, I amputated his right thigh (junction of middle and lower third) by the plan now under discussion. His convalescence was excellent. The stump was good; a circular small cicatrix formed in the centre of its face; and linear creases of skin and fat radiated from the centre to the circumference, suggesting the button sewn into an ordinary sofa-cushion. He has been rusticated for the last few months at Hurst, near Twyford, or he would have been shown to-day.

CASE II.—T. D., aged 13, was admitted into Mark Ward on June 1st, 1881, for strumous disease of the left ankle-joint and periostitis of the lower end of the tibia, with much skin-ulceration. He was operated upon on August 16th, 1881, by the coat-sleeve method (middle of leg); was discharged on September 28th, 1881; and has walked well with a bucket-leg since.

CASE III.—J. S., aged 42, was admitted into Henry Hoare Ward in August, 1880, drunk, and with a compound comminuted fracture of the right tibia and fibula, which resulted, after six months' treatment, in an ununited fracture. Many fragments of bone were removed on and subsequently to his admission. On October 8th, 1881, he was re-admitted; and on October 11th, 1881, the coat-sleeve method of amputating was resorted to, through the ununited fracture. He was discharged well on January 13th, 1882; and has been walking about with an artificial foot until within the last ten days, when he fell and broke his opposite femur (left). He promised otherwise to have shown himself to-day. The instruments used at this amputation were few—Esmarch's bandage, scalpel, artery and torsion forceps. His stump (when I last saw it, in March 1882), was the perfection of what a stump should be: central depressed cicatrix, and good fatty skin-creases around, making, by involution of the scar, a soft circular cushion, on which his weight (and he is a very heavy man) was carried painlessly.

Lastly, let me point out what are the probable advantages of this method of amputating.

1. The conservation of an abundance of skin, subcutaneous fat, and areolar tissue, which, by mechanical arrangements, are utilised, so that the scar is reduced to a minimum, and the cushions to a maximum.

2. The total abolition of sutures, which, however necessary, are invariably painful on removal; and the sutures, as previously employed, necessitated a linear cicatrix on the face of the stump.

3. The facility granted to the house-surgeon for restraining, and to the patient for escaping, secondary hæmorrhage.

4. Freedom from pain, exclusion of air, and adaptability for perfect drainage.

5. The symmetrical appearance and utility of the stump.—*Brit. Med. Journal.*

CAFFEIN IN HEART DISEASE.

The use of caffein has not become general in this country as yet. In England it has attracted some attention as a diuretic, and it has been used to some extent as a nerve tonic, Dr. Shapter having especially commended it in the treatment of nervous diseases dependent upon the abuse of alcohol.

Professor Lepine, in a recent paper in the *Lyon Medical*, urges the use of caffein in the treatment of heart disease, in the same class of cases in which digitalis is usually found valuable. He thinks that caffein possesses distinct advantages over digitalis, which he considers in detail.

He has been using caffein in these cases for four years and has administered it to more than sixty patients. He maintains that the dose, to be effective in action upon the heart, must be considerably larger than that which has ever been generally administered heretofore. He gives from 60 centigrams (9.25 grains) to one gm. 50 (23 grains), and sometimes 2 grams (30 grains), or even 2 gms. 50 (30 grains). Such doses as are directed in the books he finds utterly inefficacious.

He found that this drug is equally effective with digitalis in retarding the rate of cardiac action and in increasing its force. In comparing the relative merits of the two drugs, he asserts that caffein acts much more rapidly than digitalis, which fact, though it may be of little importance in a chronic disease, may be of real importance where asystolia occurs as an acute condition. Secondly, he says that caffein is much better tolerated than digitalis, and if taken in divided doses during the day very seldom causes any symptoms of intolerance at all, such as are not at all infrequent in the administration of digitalis. This he attributes to the facility with which caffein is eliminated. Of course, where the kidneys fail to eliminate the drug it would be retained in the system, and would occasion dis-

turbance, but he claims that the danger from this source is far less than that from the use of digitalis. Finally, he has found that by the majority of patients the caffein is preferred to the digitalis. He has repeatedly found this to be so in cases where he has used both drugs alternately upon the same patient.

On the other hand, there is a certain proportion of patients (he has found this true in about one out of twenty) in whom caffein produces insomnia and other nervous symptoms. While these cases are rare, they do occur, and this condition is an absolute contra-indication to the use of this drug.

The only other inconvenience in the use of caffein is the expense of the drug, which places it beyond the reach of patients in straightened circumstances.

M. Lepine does not claim that caffein will cure all cases of asystolia, but does assert that it has all the merits of digitalis, and some advantages over that drug. He promises to give reports more in detail of his own observations, and of cases that have been reported to him by some of his colleagues.—*St. Louis Courier of Medicine.*

IMPROVED METHOD OF TREATING UTERINE DISPLACEMENTS.

BY ROBERT BELL M.D.

The peculiar poisoning of the uterus in the body, the elasticity, or rather yielding nature of its supports, and its dependence upon the health of the neighboring viscera for this support being uniformly maintained, renders it peculiarly liable to displacement. Anything which interferes with circulation in the pelvis will naturally interfere with the health of the womb, and will thus render it more susceptible of disease, and will predispose to malposition. If constipation exists, then the weight of the feces in the sigmoid flexure and the higher reaches of the colon will not only interfere with the free circulation in the pelvis, but will also by mechanical pressure on the organ crowd it out of position. If we have an irritable bladder, and in consequence the viscus being unable to retain more than a few drachms of urine, the straining which accompanies micturition will force the uterus forwards. Another pregnant cause of displacement is dyspepsia, which causing distention of the intestinal canal, brings undue pressure to bear from above upon the fundus. One more powerful factor has recently been pointed out, viz., the endeavor to obtain greater compass and volume in singing by powerful action of the abdominal muscles, and so forcing downwards all the viscera. It is obvious that any causes such as those enumerated must be removed before local remedies can have the desired effect

It will also be necessary to attend to the health of the canal of the neck and body of the organ at the time the displacement is being tackled, or we will be most certainly disappointed.

I have had this remedy as it now stands in use about two years, and have treated over 200 cases by means of it alone. I have not used a pessary during the past 18 months. Every form and gradation of displacement has come under observation, and in every case great relief was obtained, and in the majority of cases a complete cure was the result. The patient requires to be under careful and patient observation for weeks in every case, and in many instances for months at a time; but surely these are trifling objections. I had used, for years previously, the ordinary glycerine of tannin of the pharmacopœia; but though I found it a most efficacious astringent, yet its expense and the disadvantage of staining the underclothing told very much against it. Had recourse to the following:—Glycerine, 80 oz.; alum, 10 oz.; carbolic acid, $1\frac{1}{4}$ oz. If a displacement continues for any length of time, hypertrophy of some portion or of the whole organ is the result. We have thus a greater strain thrown upon the uterine supports, so that what at one time was a result becomes a factor in aggravating the disease. Our first duty, then, is to endeavor to reduce the overgrowth, and at the same time prevent its recurrence by rectifying the position of the organ and retaining it *in situ*. When we have a hypertrophied condition of the walls of the uterus, in the majority of instances there is softening of the texture, so that a flabby condition results. In these cases it is a matter of little difficulty to restore the position of the organ, but as soon as the support is removed it falls back into its abnormal position. Moreover if there exists, (which frequently does), any amount of inflammatory action, the presence of a pessary is a most serious source of danger; and besides, supposing there is no danger of an attack of acute metritis, there yet remains the disadvantage that the relief is entirely due to the fact that a mechanical support being retained in the vagina, and which every little while requires to be removed to make way for one of larger size, till in the course of a short time the walls of the vagina become as capacious as the pelvis will admit of; moreover the woman always retains the disagreeable consciousness that she is wearing an instrument, and there is ever present the danger of the hard pessary injuring the soft parts upon which it is constantly resting. A pessary to be of service must fit accurately, and only long experience and patient care will ensure this result. If it does not apply itself with precision to the parts, it certainly will result in serious mischief. One advantage of my treatment is, that it is rarely necessary to employ either probe or elevator when there is a flexion. This is another prolific source of danger removed.

Prolapse of the uterus: This may vary from a slight lowering of the position of the womb to complete procidentia. It is due either to (1) an increase in weight of the organ; (2) to faulty action of the supports; (3) it may arise from pressure from above, or from all these factors combined.

A lacerated perinæum must of course be rectified before treatment. From whatever cause prolapse occurs, there is always, as a result, hypertrophy of the organ and relaxation of the vaginal walls and uterine ligaments. If the uterus, then, is elevated to its normal position, and retained there by a suitable appliance, the hypertrophy will disappear, and if at the same time we can stimulate the capillary circulation of the parts, and also cause a steady drain to take place of the watery constituents of the blood in the uterus and its neighborhood, we will do much to remove the tendency to the displacement by reducing the size of the organ and simultaneously strengthening its supports. This end is attained most satisfactorily by replacing the prolapsed uterus in its normal position, and retaining it there by a tampon of cotton saturated with the glycerine of alum and carbolic acid, and allowing this to remain in the vagina from 3 to 4 days. The tampon excites an abundant watery discharge from the vagina, necessitating the patient constantly to wear a napkin. Glycerine excites this discharge, but when combined with an astringent, the effect is an even more profuse drainage of the watery components of the blood; the effect on the capillary circulation is also intensified, and the astringent effect on the vaginal wall is most beneficial. By this means alone I have completely cured procidentia which existed 3 to 8 years, after above treatment had been persevered in for from 2 to 7 months, and in a few cases where the disease existed for a much greater time very great relief has been experienced after more protracted treatment. If the tampon is merely saturated with glycerine it becomes very offensive after a few hours; when, however, the carbolic acid is added, there is no fetor at the end of four days when the tampon may be replaced. We can keep the organ *in situ* for months, and likewise act on it and the neighboring tissues to restore them to a healthy condition, the woman's general condition indicating a marked improvement. I claim for this method of treatment equal advantages with any plastic operation that may be performed upon the vaginal wall; and there is this, that the uterus itself also probably partakes of benefits which an operation on the vaginal walls cannot confer.

Versions and flexions of the uterus: I have treated quite a number of cases which had been subjected to the general routine of pessaries and stems without deriving any benefit whatever, and which have, after a few applications of the tampon, expressed themselves as feeling great relief. It may perhaps be interesting to give one case.

This lady had been suffering from retroflexion of the uterus for six years, which was aggravated very much by obstinate constipation, but this symptom had been quite overlooked. She was a most miserable looking object, with an ashy complexion, which, however, was partly attributable to the absorption of fetid matter from fæcal accumulations in the rectum and colon, as when these masses were removed and kept from accumulating, her complexion improved, and she felt somewhat relieved in every way. Yet the least exertion completely prostrated her, and the dysmenorrhœa was most intense. For six years she had been under treatment by means of pessaries and stems of all descriptions, from solid silver stems down to pessaries made of gutta-percha covering copper wire, and with no benefit; in fact, she was daily getting worse. In this case I used *two* tampons saturated with the solution, one much smaller than the other, so that it would occupy a position supporting the fundus, well up in Douglas' pouch, while the other and larger tampon was placed behind the cervix, and acted as a support to the smaller. After three months she was able to endure considerable fatigue, and eat and digest satisfactorily, and sleep well, feats she could not perform before; and at this moment I know she enjoys life thoroughly.

I think it often a good plan to employ two tampons in retroflexion and also in ante flexion, but, as a rule, one answers all the purpose. It is gratifying to observe the speedy effect of this treatment on the bladder symptoms in anteversion and ante flexion. I think I need hardly enter into further details as to the method of treating other varieties of displacements.—*Edinburgh Med. Four.*

ADVICE TO DOCTORS—BY DR. CATHILL.

Do not let your wife or any one else know your professional secrets, nor the private details of your cases, even though they are not secrets; nothing is more mortifying or hurtful to the feelings of patients than to hear that the details of their cases are being whispered about as coming from the doctor or those he has told. If you allow yourself to fall into the habit of speaking too freely of ordinary affections, or submit to be indiscriminately interviewed concerning your patients, your very silence in disreputable cases will betray them. The credit of whole families and the character of its individual members will sometimes be at stake, and unless you shut your eyes and do not see too much, also your mouth, and do not say too much, it may ruin them and involve you. You will be allowed to see people in a very different light from that by which other people view them. The community see one another with a veil over their moral and

physical afflictions, over their blasted hopes and the sorrows that flow from love and hatred, their poverty and their crimes, their vexations and their solitudes; *you* will see the deformities, debilities and deficiencies with the veil lifted, and will become the repository of all kinds of moral and physical secrets. Observe reticence at your visits, and do not mention the private affairs of anybody from house to house. Seal your lips to the fact that patients have or ever had venereal diseases, hemorrhoids, fistula, ruptures, leucorrhœa, constipation, or that abortions, private operations, etc., have taken place, or that any one takes anodynes or liquor, or has this, that or the other bad habit. No matter how remote the time, if patients wish their secrets told, let them do the telling. You have no right to tell the affairs of patients to any one without their consent. But while silence should be your motto, it is your duty to society and to the laws to expose and bring abortionists and unprincipled quacks and heartless vampires, whether acting under cover of a diploma or not, to justice, whenever you meet proof of their wicked work.

In prescribing medicines for the sick it is better to confine yourself to a limited number of remedies with whose uses and powers you are fully acquainted, than to employ a larger number of ill understood ones. When you order unusually heavy doses of opiates, etc., instead of using the common signs, take care either to write the quantity out in full or to underscore both name and quantity. It is safer also to put the names of heavy-dose patients on their prescriptions. When you order morphia, etc., in unusually large doses, it is well to have it made into pills or granules, and direct the druggist to "put them into a bottle." It is so unusual to dispense pills in a bottle that it informs the compounder that the quantity is not a mistake but is as intended, and guards patients and attendants against taking or giving them in mistake. When you prescribe pills, powders, etc., for sailors and persons whose business exposes them to get their medicines wet or wasted, it is better to direct them to be put into bottles or tin boxes instead of paper boxes.

A placebo or tentative remedy should, as a rule, be small and easy to take. A very good form is prepared thus: Purchase a pound box of No. 35 unmedicated homœopathic globules, which cost but 35 cents, and immerse one half of them in fluid ext. of belladonna, and the other half in compound tinct. of iodine, for twenty minutes, then roll them about on a newspaper till all surplus fluid is absorbed, and let them dry; after which they can be put into bottles, with a small quantity of powdered cinnamon in one bottle and powdered liquorice root in the other to prevent agglutination. These can either be given as globules, or put between paper, crushed, and given as powders; they make cleanly,

convenient placebos for office use, and cost so near nothing, and a pound will last so long, that you can afford to give them away and charge such patients for advice only. They will suit almost any case requiring a placebo. Be careful to keep a straight face and to give minute directions concerning the manner and time of using inert remedies given simply to amuse people who are morbid on the subject of health, and you will do them double good. You will not only find that your placebos amuse and satisfy people, but you will often be surprised to hear that some full-of-faith placebo-takers are chanting your praise and are actually willing to swear that they are cured of one or another awful thing by them; cheated into a feeling of health by globules, or teaspoonful doses of flavored water, or liquorice powder, as by a charm; some who seem to be magically benefited by a teaspoonful of—nothing—will actually thank you for saving their lives. What a sad comment on the discerning power of the nineteenth century! What a sad fact for legitimate medicine! What a gold mine for quackery! Just here let me impress a caution: Take care that seeing cases get well thus does not create in your own mind unconscious deception, and lessen your belief in the necessity for medicine in real sickness, and modify or destroy your usefulness when medicines are required. Never send a patient to the drug store with a prescription for bread pills. It is not right to make any one pay for bogus medicines; besides, if, from among all the articles in pharmacopœia you cannot devise some trifling placebo that is more plausible than bread pills, you must have an unusual paucity of resources. Moreover, were a patient to discover that he had been paying for such a thoroughly insipid cheat, he would naturally feel victimized and indignant.

Never solicit people, either by word or manner, to employ you; for such a course would surely either repel them or prevent your enjoying the necessary esteem. Many people are naturally capricious and fickle, and, no matter how earnestly any one tries to serve and satisfy them, they will change about from one to another. Others are more true, and will adhere to you through everything, good or bad, with surprising tenacity. You should, however, always found your hope of being retained upon deserving it. Do not set your heart or faith upon the continuance of the patronage of any one, for you will many a time be replaced by those you know to be far below you in everything that unites to make a good physician. Sometimes you will be unexpectedly and unjustly dropped out of a family, and the most ignorant or shallow fellow in the whole section, or an old lady, or a homœopath, will supersede you, and you may have to bear the reflection and the wrong without showing the slightest chagrin. Ability to promptly detect loss

of confidence or dissatisfaction with either yourself or your remedies is one of the acquirements that you must seek to attain, if you do not already possess it.

A patient has a legal right to dismiss you from a case, and you have also a perfect right to relinquish attendance on him at any time. Indeed, you may sometimes find yourself so hampered or harassed, or maltreated in a case, that to retire from it is your only alternative. Whenever dismissed from a case, consider attentively the combination of circumstances that conspired to produce the dismissal, and how you might have averted it, that you may gain additional familiarity with the art of satisfying and retaining patients. Some people, indeed whole families, who will almost idolize you as long as you are lucky and have neither unfortunate cases nor deaths in their families, will turn as rudely and maliciously against you as soon as either occurs—as if you kept the book of life and controlled the hand of God. When you are unjustifiably dismissed from a case, especially if it is to make room for an irregular doctor, do not tamely consent to be thrown aside in such a manner. Express your perfect willingness and your determination to retire, but make it known in a gentlemanly way that treating you thus wounds your sensibilities, and that such action necessarily casts undeserved reflection on you and does your reputation a very great injury. Such a protest will secure for you greater respect, and will counteract the injury following your dismissal better than if you meekly submit without protesting.

THE following story of Sir James Paget is going the round of the newspapers. The well-known surgeon has a country house in Kent. A few days ago, as he was out walking, he witnessed a serious accident. Two men were driving in a cart, when one of them fell out, and, the wheel passing over him, broke his leg. Sir James, with a kindness which belongs to his profession, had the man lifted into the cart, and proceeded to do what was required to be done. In the meantime the poor sufferer's companion hurried off to the local medico, whom he addressed in this fashion: Please, sir, Bill has been and fallen out of the cart and got his leg broke; there's an old cove a-pulling of him about, but I can see he ain't up to much, so I wants you to come at once, sir, 'cos Bill's wery bad." The doctor hastened to the scene, and discovered at once, to his surprise, that the "old cove" was Sir James Paget, who in the interim had improvised some splints and bound up the leg with a copy of the *Times* newspaper.

Thomas Keith, of Edinburgh, has recently removed the uterus for prolapsus. The result was good, as most of his results are.]—*Am. Med. Digest.*

MULLEIN PLANT IN THE TREATMENT OF PULMONARY CONSUMPTION.—F. J. B. Quinlan, M.D., M.R.I.A., F.K.Q.C.P., Physician to St. Vincent's Hospital Dublin, observes that "from time immemorial the *Verbascum Thapsus*, or Great Mull-ein has been a trusted popular remedy in Ireland, for the phthisis." After relating seven cases where it proved of benefit, he concludes, "I have set down the above cases simply in the order in which they occurred, and with no view of supporting any preconceived idea. These cases, although too few to justify any general conclusion, appear to establish some useful facts. The mullein plant boiled in milk is liked by the patients; in watery infusion it is disagreeable, and the succus is more so. The hot milk decoction causes a comfortable (what our Gallic neighbors call *pectorale*) sensation, and when once patients take it they experience a physiological want, and when the supply was once or twice interrupted, complained much in consequence. That it eases phthisical cough, there can be no doubt; in fact some of the patients scarcely took their cough mixtures at all—an unmixed boon to phthisical sufferers with delicate stomachs. Its power of checking phthisical looseness of the bowels was very marked, and experiment proved that this was not merely due to the well known astringent properties of boiled milk. It also gave great relief to the dyspnœa. For phthisical night-sweats it is utterly useless; but these can be completely checked by the hypodermic use of, from the one-eightieth to one-fiftieth of a grain of the atrophia sulphate; the smaller dose, if it will answer, being preferable, as the larger causes dryness in the pharynx, and interferes with ocular accommodation. In advanced cases, it does not prevent loss of weight, nor am I aware of anything that will, except koumiss. Dr. Carrick, in his interesting work on the koumiss treatment of South Russia (page 213) says: 'I have seen a consumptive invalid gain largely in weight, while the disease was making rapid progress in her lungs, and the evening temperature rarely fell below 101° Fahr. Until then, I considered that an increase of weight in phthisis pulmonalis was a proof of the arrest of the malady.' If koumiss possessed this power, mullein clearly does not; but unfortunately, as real koumiss can be made from the milk of the mare only, and as it does not bear travelling, the consumptive invalid must go at least to Samara or Southern Russia. In pretubercular and early cases of pulmonary consumption, mullein appears to have a distinct weight-increasing power; and I have observed this in several private cases also. Having no weighings of these latter, however, makes this statement merely an expression of opinion. In early cases, the mullein milk appears to act very much in the same manner as cod-liver oil; and when we consider that it is at once cheap and palatable, it is certainly worth a trial. I will continue the research

by careful weighings of early cases; and will further endeavor to ascertain whether the addition of mullein to the cultivating solution prevents the propagation of the phthisical bacillus."—*British Medical Journal*.

TREATMENT OF DYSENTERY.—Mr. F. Rawle, M.R.C.S., observes that, at the present time, when dysentery is very prevalent, especially amongst those who have returned from the Egyptian war, any suggestion that may mitigate the suffering of so fatal a malady will be hailed with gratitude. The plan he has used with most success is the following. First, having placed the patient between warm blankets, a pint and a half of warm water, at a temperature of 90° Fahr. is injected. This is seldom retained longer than a few minutes, but is pronounced very grateful to the patient. When the water has soothed the mucous membrane of the colon and rectum, and brought away any *effete* matter, two ounces, by measure, of the following enema is administered with a gum-elastic bottle. R Quinine sulphate ten grains; compound tincture of camphor four drachms; decoctum amyli to two ounces. Mix, and when about milk-warm, inject, which is generally retained; but, if ejected, it may be repeated after an hour or two. This has been found of great service, and very grateful to the patient, the effect is like magic. If griping pains be felt over the region of the epigastrium, half-drachm doses of chlorodyne, in some aromatic water, mint, caraway, or aniseed should be given. The diet, of course, should be of the most soothing kind: jellies, isinglass, linseed, toast and barley *ad libitum*. Ipecacuhana appears of little service, and Mr. Rawle has discarded it from his treatment. Warm turpentine stupes on warm flannels, over the hypogastrium prove very beneficial.—*British Medical Journal*.

TUBERCLE BACILLUS AND PHTHISIS.—Dr. T. Henry Green (Physician to Charing Cross Hospital, and Senior Assistant-Physician to the Hospital for Consumption and the Diseases of the Chest, Brompton), in concluding a lecture on the relation of this micro-organism to phthisis, observes, with regard to treatment: "What is the practical teaching of Koch's discovery with reference to the prevention and cure of phthisis? If our pathological conclusions be even only partially true, they clearly indicate, I think, the necessity of carefully distinguishing between the bacillus and the conditions which favour its influence, and of directing our treatment to both. We must endeavor to prevent the access of the organism, and, if possible, to destroy it after it has effected an entrance; and we must also strive to maintain a healthy condition of the pulmonary tissues, and thus prevent the occurrence of that tendency to apical stagnation which appears to be such an important, if not essential,

factor in the disease. The latter of these indications is, I believe, as important as the former; and it is, perhaps, rather in danger of being lost sight of in the very natural eagerness with which attention is now being directed towards the bacillus.

"Firstly, then, with regard to the condition of the lung which favors the influence of the bacillus. Here it is only necessary to remark that, whatever promotes a vigorous state of health will, by improving the condition of the blood, the nutrition of the vessels, and activity of the circulation, and the exercise of the respiratory function, tend to prevent that stagnation and transudation in the highest portions of the lungs, the etiological importance of which we have so especially insisted upon. The value of treatment which has for its object the fulfilment of these indications in the prevention of phthisis it is, I believe, difficult to over-estimate; and its usefulness is almost equally valuable when the disease is established. I cannot but think that, in the meantime, such treatment promises better results than any attempts to attack the specific organisms. Secondly: the tubercle bacillus. The consideration of this naturally divides itself under two heads: (a) the prevention of its access, and (b) attempts to destroy it when the disease is developed. (a) The prevention of the access of the bacillus. The present position of our knowledge appears to point to the desirability of adopting measures for the disinfection and destruction of the sputa of patients suffering from phthisis; and perhaps, also, of the alvine secretions, when there is any evidence of tuberculous disease of the bowel. It also raises the question as to how far it is desirable to allow individuals who are not consumptive, but who inherit a phthisical tendency, and especially when such individuals are out of health, to intimately associate with those who are suffering from the disease. If our pathology continues to move on the same lines, this subject may become one requiring the consideration of those who manage our hospitals. (a) The destruction of the bacillus after the disease is established. Attempts to do this are made principally by means of antiseptic inhalations. This is the fashionable, though perhaps somewhat misdirected, therapeutics of the day. A respirator charged with some antiseptic, such as creasote or carbolic acid, is now being largely used in the treatment of phthisis. Although I should be very sorry to unfairly criticise such treatment, I cannot but think that the evidence that its usefulness is in any way dependent upon its destruction of the bacilli, or of any infective substance which they may originate, is wanting. It seems to me much more probable that such inhalations, when beneficial, are so mainly through the favourable influence which they exercise upon the mucous membrane and secretion; and when, as is so often the case, they are combined with chloroform, they will also act as direct sedatives.

What we want are cases of early and progressive phthisis in which antiseptic treatment alone, without adjuncts, is followed by marked improvement. When it can be shown *e. g.*, that the pyrexia of early phthisis is reduced by such treatment, we shall have evidence pointing to the influence of the germicides upon the bacillus of considerable value. We are now making some observations in this direction, but, at present, with negative results. Whilst, therefore, I do not wish to be understood to discourage the treatment of phthisis by antiseptic inhalations, I think we must be careful as to the interpretation we put on their results. The treatment of phthisis and of other pulmonary diseases by means of medicated atmosphere has been greatly stimulated by Koch's discovery. Such treatment has undoubtedly been too much neglected in the past, and its prosecution promises the best results. But, in the meantime, I think we have no evidence that we are able by such means to influence the tubercle bacillus; although, if Koch's investigations be true, the discovery of some agent which, by destroying it, will arrest its injurious influence, is obviously the greatest desideratum."—*British Medical Journal*.

DIALYZED IRON.—Dr. Prosser James has lately said, in a summary of the position which dialyzed iron is entitled to hold in medicine, that the persalts of iron are frequently employed solely on account of their astringency, while the protosalts are occasionally considered as being destitute of this quality. The freshly-prepared carbonate is an excellent mild chalybeate, but difficult to keep in an unaltered state, so that preference is given to reduced iron. The scale preparations of iron are held in repute, both from the extreme facility of their use, and their agreeable taste. When these three forms of iron are inadmissible, dialyzed iron may be resorted to with admirable effect. It is a milder chalybeate than the three preceding, and does not produce the slightest irritation.

A recent analysis by Professor Tichborne of Wyeth's preparation agrees almost exactly with Graham's statement, that dialyzed iron contains 98.5 parts of the oxide and 1.5 parts of hydrochloric acid. The liquid thus obtained differs altogether from an ordinary solution of salts of iron, by its not giving rise to the blood-red color on the addition of alkaline sulphocyanide, nor to the blue precipitate with ferrocyanide of potassium. It does not become cloudy on boiling, nor when agitated with two parts of ether and one part of alcohol is the ether layer colored yellow. It is so sensitive that ordinary spring water will cause a precipitate, yet no precipitate is produced by nitric, acetic, or muriatic acid. Graham's solution gelatinized in about twenty days, and he regarded it as a solution of colloid ferric hydrate which, he considered, existed in both a soluble and insoluble form. It is,

however, never free from chlorine. Theoretically, therefore, the liquid is a solution of a basic oxychloride, but it can never be imitated by dissolving saturated solutions of the hydrate. All these artificially-made liquors are astringent, with ferruginous taste and acid reaction. Respecting the therapeutic value of dialyzed iron, of which there has lately been some inclination to doubt. Dr. James says there is no question. By the method now followed of counting blood-corpuscles, it is found that the taking of dialyzed iron both increases their number and improves their condition. Dr. James gives, as an average dose, twenty to fifty drops, daily, in three doses. Dr. Weir Mitchell, of Philadelphia, gives as much as a drachm at a time. Specimens have appeared in the market which are not only innocent of any acquaintance with a dialyzing membrane, but seem little else than diluted solution of perchloride of iron.—*Chem. and Drug.*

EXTIRPATION OF THE UTERUS FOR PROLAPSE.—Dr. Duvelius (*Centralb. f. Gynakol*) reports the case of a woman operated upon by Dr. A. Martin in Berlin. She was forty-six years of age, and had first menstruated at the age of seventeen. At twenty-two years of age she gave birth to a large child, the labor being normal. Thirteen days after delivery prolapsus began to be noticeable to her, and after a time it became excessive. The cervix was amputated afterward, and anterior kolporrhaphy was performed at one sitting, and posterior kolporrhaphy and perinæorrhaphy at another. The operations were complete failures; the parts projected to an exaggerated degree, and had undergone extensive erosion and ulceration. In this condition she presented herself at Dr. Martin's polyclinic. Another anterior and another posterior kolporrhaphy were determined upon; but, when the patient was anæsthetized, an entirely retroflexed uterus was found to be so completely surrounded by the remains of a perimetritic inflammation that total extirpation alone seemed practicable. After disinfection of the field of operation, incision was made around the remnant of the *portio vaginalis*, which was followed by free hemorrhage. The uterus was then drawn well downward, and an elastic ligature was placed around it. Douglas' pouch was next opened, as the uterus was detached at that aspect with scissors, knife, and fingers. In a similar manner the separation was made anteriorly. The uterus being now dragged forcibly downward, three ligatures were passed upon either side to secure the vessels, after which they were cut away. The stumps of the ligaments were brought down through the wound, and a series of both and superficial sutures was passed, securing the cut edges of the peritoneum and of the vagina. The operation was followed by peritonitis, but the patient evidently recovered. Anterior and posterior kolporrhaphy were subsequently performed,

and the patient was believed to be entirely cured.—*N. Y. Med. Journal.*

URETHROTOMY IN CYSTITIS. Chronic Cystitis with enlarged prostate in advanced life, requiring the regular use of the catheter for the evacuation of the urine, not unfrequently becomes aggravated by the very process of catheterization, and an irritable condition of the bladder is produced, whereby the more frequent use of the instrument is necessitated, being sometimes required as often as every hour or even oftener.

It was proposed years ago to perform the same operation as that required for stone for the relief of this trouble, with the idea of giving rest to the bladder, by preventing the accumulation of urine, but the success attained was not such as to place it beyond question as a proper procedure.

Sir Henry Thompson has now devised an operation by which he accomplishes the end desired, that of rest to the bladder and urethra, and which he describes as follows:—The patient, under ether, is placed in the lithotomy position, and a grooved median staff introduced into the bladder. A small vertical incision is then made in the raphe, just above the anus, only large enough to admit the index finger, and ending in the staff at the membranous portion of the urethra, which should be divided for half an inch at most. The staff is then withdrawn, and a large vulcanized catheter or tube about No. 20 (English scale), is inserted, with the end just within the bladder, and securely tied by means of a tape or a bandage around the waist. This is allowed to remain in for several days. The relief obtained, he says, is immediate and remarkable. The urine which had contained mucopus and blood, and was alkaline and offensive, changed in a few hours and became natural in color, acid and almost clear. The catheter was removed on the eighth day, and healing of the perineal wound was rapid. Six months afterwards there had not been a return of the troublesome symptoms. This operation, which he says is only a very limited urethrotomy, he regards as a very safe and simple proceeding. Of course it has no effect in diminishing the size of the prostate, so that with the healing of the external wound, resort must be had to the catheter as formerly.—*Medical Review.*

LIGATURES AND SUTURES.—The following is an extract from a recent communication by Dr. E. J. Kempf to the *Medical Herald*:—Professor S. Gross gave it as his experience that the surgeon's silk is the best material for ligatures and sutures. It answers all the purposes of a suture except, perhaps, in a few particular instances, as in operations on the perineum. He uses the surgeon's silk suture altogether; in this differing from Drs. Agnew Ashhurst, who use the silver-wire suture in

preference to all others. As a ligature, says Dr. Gross, the surgeon's silk has no superior. It should be good silk and should be waxed before using. Cat-gut and other animal ligatures will be found useful in exceptional cases, as in operations in the abdominal cavity, etc. For such cases, Dr. Gross prepares his own cat-gut ligature in the following manner: Buy violin strings E No. 7, put them for two weeks in a mixture of chromic acid solution and carbolyzed glycerine in the strength of one part of the acid to five of the solvent. The adhesive plaster that Dr. Gross uses exclusively in connection with the sutures, and for all other purposes, is Mead's as manufactured by Seabury & Johnson, of New York.

The following points are culled from the lectures of Prof. W. Goodell, in the University Hospital:—Dr. Goodell does not operate in laceration of the cervix, if the sides of tear are in apposition—that is, lie parallel and are not turned up. In erosion of the cervix he recommends the local application of collodion in which iodine has been dissolved, or the strong tincture of iodine may be used. In carcinoma of the uterus Dr. Goodell applies locally the tampon soaked in a glycerole, and gives constitutionally ten drops of Fowler's solution before meals for the cancerous cachexia and twenty drops of fl. ext. ergot several times a day to prevent too much bleeding. After every operation on the uterus Dr. Goodell applies a tampon, cup-shaped, in which glycerine is poured. He also instructs the patient how to do this. Dr. Goodell's favorite local applications for endometritis and other similar affections of the uterus are: 1. A mixture of one ounce each of iodine, chloral, and carbolic acid. 2. One drachm of pure carbolic acid to one ounce of glycerine. 3. A saturated compound tincture of iodine. 4. A solution of nitrate of silver of one drachm to the ounce.

HOW LONG SHOULD THE SUBJECTS OF CONTAGIOUS DISEASES BE ISOLATED?—The Academy of Medicine of Paris, after a careful study and report of a special commission, has given the following answer to the above enquiry. (*Gaz. Med. de Paris*).

1. Pupils affected with chicken-pox, small-pox, scarlet fever, measles, mumps, or diphtheria, should be strictly isolated from their comrades.

2. For small-pox, scarlet fever, measles, and diphtheria, isolation should not be shorter than forty days; for chicken-pox and mumps, twenty-five days is enough.

3. Isolation should last until after the patient has been bathed.

4. The clothing worn by the patient at the time he was taken sick, should be subjected to a temperature of 90° C. (194° Fahr.), and to sulphur vapor and then well scoured.

5. The bedding, curtains, and furniture of the sick-room should be thoroughly disinfected, washed, and aired.

6. The pupil of a school, after recovery from one of the above contagious diseases, should not be readmitted to the school unless furnished with the certificate of a physician that the above precautions have been observed.

CHLORAL HYDRATE IN DIPHTHERIA.—The *New York Medical Times* in a report of a meeting of the medical society of Northern New York says that an extract from a letter written by Dr. Allen, of Lawyersville, was read by the secretary, showing that a solution of *hydrate of chloral*, from fifteen to thirty grains to the drachm of water, the strongest solution being employed in adult cases, would speedily remove diphtheritic deposits from the throat. It is applied by means of a brush, at intervals of two or four hours. The doctor states that the densest coating of membrane seldom resists the second or third application. We commenced the use of chloral hydrate in severe cases of diphtheria about five years ago and have used it in quite a number of very severe cases with the most satisfactory results. Will some of our readers try it and report results?—*Med. Summary*.

TREATMENT OF EPILEPSY.—Dr. Saundby read a paper on the treatment of Epilepsy, before the Midland Medical Society, in which the following points were insisted on: (1) The value of combining the bromides of potassium, sodium and ammonium, as recommended by Professor Brown-Sequard; (2) The advantage of adding digitalis, and sometimes theine, to the mixture to counteract the depressing influence of the bromides; (3) The utility of zinc as an adjuvant in the treatment; (4) The successful use of borax in some cases of obstinate epilepsy; (5) The value of theine, caffeine and nitro-glycerine in the treatment of epileptic vertigo.—*British Medical Journal*.

RADICAL CURE OF RUPTURE.—The secret methods of cure practiced by Dr. George Heaton successfully in one hundred and forty cases is now, after his death, published by Dr. J. H. Devonport. He injected extract of quercus alba into the hernial canal outside the peritoneal sac, to excite a mild degree of irritation in the tendons and fasciæ, so as to lead to contraction. No fatal results followed nor any serious complication. It often cured, and when it failed great relief was obtained, so that a light truss sufficed to support the protrusion.—*Lou Medical News*.

TREATMENT OF RINGWORM OF THE SCALP.—Dr. Adler Smith recommends oleate of mercury with ung. petrolei (ten per cent) in chronic cases of tinea of the hairy scalp. This causes less irritation than the ordinary preparation, and children bear it well, although if the cases are under seven years of age it may be found necessary to dilute it further.—*British Medical Journal*.

A PIECE OF STEEL REMOVED FROM THE EYE BY THE ELECTRO-MAGNET.—On July 20th, while at work, a young carpenter came to the hospital with a chip of his chisel in the left eye. On examination by focal illumination, the piece of steel could be seen in the anterior chamber, touching the iris in the lower outer quarter. After an ineffectual attempt to remove it, the patient was again put under ether, and an incision made through the cornea, near the sclerotic junction. The pointed pole of the magnet (described below) was made to touch the lips of the incision, and the battery connected; the foreign body flew up, attached itself at once, and was extracted with the greatest ease. Very slight iritis followed, and the eye was perfectly well in seven days. The magnet used was the ordinary bar (with a coil round it), shaped like a small horseshoe, by the ingenuity of Mr. Gordon, of the Cambridge Physical Laboratory. The poles were prolonged into sharp iron points, something like a crab's claw, fixed about half an inch apart, one longer and sharper than the other. These points were movable, being screwed into the magnet-poles, and in no way spoiled the magnet. The whole apparatus was adapted in about an hour's time. The battery used was a five-celled Groves. I send an account of this case, to show how an ordinary electro-magnet may be adapted for such cases, with little expense or trouble.—G. Wherry. —*British Med. Jour.*

TREATMENT OF INTERNAL HEMORRHOIDS.—The following case coming under the above heading aptly proves the use of its subsequent treatment: J. F., aged sixty. I found him suffering from internal piles with prolapsus ani and severe hemorrhage on defecation, or even on walking. He had given up all work. I prescribed the ordinary remedies for three weeks; but as it was quite useless, and the man became so weak from the pain and loss of blood, and the prolapsed bowel, with its congested mucous tissue, so difficult to return, I determined upon the following: I applied a ligature steeped in carbolized oil to the base of a large hemorrhoid, and touched the surrounding vascular membrane with nitric acid, anointed the parts with simple lard, and then with firm pressure replaced the bowel. I kept him on fluid nourishment, with opiates occasionally for a time, and in a month he was about again in good health.—*Mr. T. Wells Hubbard in British Medical Journal*

ASTHMA MIXTURE.—

R Tinct. lobeliae, 3 v,
Ammonii iodidi, 3 ij,
Ammonii bromidi, 3 iij,
Syr. tolutani, 3 iij, M.

Sig.—Teaspoonful every one, two, three or four hours. This gives relief in a few minutes, and sometimes the relief is permanent.—*Fothergill.*

TRENDELENBURGH'S METHOD OF AMPUTATION AT THE HIP JOINT.—In the American *Medical Journal* Dr. VARICK of Jersey City Hospital describes an amputation at the hip joint, which was successful mainly through the saving of blood by using Prof. Trendelenburgh's method of preventing hemorrhage. This method requires a flat steel rod a foot long and 1-4 inch wide, with a movable lance-shaped point, the rod to be bi-convex on section, one-fourth of an inch thick in the middle, with blunt but smooth edges. This rod is thrust obliquely through the soft parts in front of the joint, in the same way as the two-edged knife in the well known method of Lisfranc, but nearly an inch higher. The rod enters 1½ in. below the anterior superior spinous process of the ilium, passes between the femoral artery and the bone and emerges at the fold of the scrotum. The point being removed, an elastic band is firmly wound figure-of-8 fashion around the projecting ends of the rod, compressing effectually the great vessels. Lisfranc's knife is then introduced a little below the rod and by cutting from within outwards in the usual way the anterior flap is formed. The vessels being tied, the band and rod are removed and the joint disarticulated and the posterior flap formed. The patient made a good discovery.—*Pacific Med. and Surg. Journal.*

+ INCONTINENCE OF URINE.—For incontinence of urine in children, Dr. Janeway (*Medical Record*) recommends a combination of ergot, belladonna and iodide of iron.

R Tinct. ergot, 3 ij,
Tinct. belladonna, 3 j,
Syr. iodide iron, 3 j,
Simple elixir, 3 j. M.

Sig.—One teaspoonful morning, noon and bedtime to a child ten years old.

THE *College and Clinical Record* publishes the following anecdote of Jenner: The celebrated Dr. Jenner, who introduced vaccination, was a man of genial wit, and the following lines addressed to a lady upon the recovery of her daughter, and sent with a pair of ducks, affords a specimen of his facetious vein:

"I've despatched, my dear madam, this scrap of a letter, To say that Miss——— is very much better, A regular doctor no longer she lacks, And therefore, I've sent her a couple of quacks."

A case of cirrhosis of the liver in a child aged three and a fourth years was shown by Dr. H. R. Hutton at a late meeting of the Manchester Medical Society, England.

UNWISE.—The decree by virtue of which the retirement of college professors in France has been enforced on their attaining the age of sixty-five has been abrogated.

THE CANADA LANCET.

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ALCOHOL AS A THERAPEUTIC AGENT.

In the halcyon days when "ignorance was bliss," and it was "folly to be wise," no one ever doubted the curative properties of alcohol. Whether for better or for worse, we of to-day, live in a time remarkable for its spirit of eager inquisitiveness. No theory however hoary with age, or no practice however honored by usage, is safe from its daring intrusion, or can, by any means elude its still hunt, every theory is placed in the crucible, and every practice submitted to searching inquiry. Formerly, alcohol was thought the royal thing, a sort of cure-all, and no serious illness was passed through without invoking its aid. But science is abroad in the world, and clinical observation is wide awake, so that even with alcohol things are not as they used to be. Now, the prudent physician hesitates, and ponders well, before he prescribes alcoholic stimulants. Hundreds of the best men in the profession, scattered over different countries, have discarded its use altogether. And, worse still—for the good old times, this change is led by the very men whom the profession specially delight to honor, and whose utterances as touching other matters, are regarded as almost oracular. Amongst such may be named, Dr. W. B. Carpenter, the great physiologist and author, Dr. Benj. Richardson, the thoughtful physician, and painstaking investigator, and others equally illustrious, whose names are familiar to every reader. Every observer must have noticed the setting in of a counter current to the more extravagant claims set up for alcohol as an alleged therapeutic agent. Time

has only served to increase the force and volume of that current. The question has steadily pressed on to the front, until now it forces itself upon us in such a way as to make escape no longer possible. The revelations of clinical experience no less than of science admonish us to call a halt, to take, at least, a hasty survey of the ground on which we stand. Considering the potency of this agent, it may be within certain limits, for good, but most certainly for evil; and considering also the enormous quantity consumed under the guise of medicine, it is safe to say, that this problem to-day overshadows all others combined, in the domain of therapeutics. Neither preconceived opinions nor confirmed prejudices, should, for one moment, be permitted to become barriers to a free and frank discussion, from all sides. We are rapidly reconstructing our materia medica, partly it is true on well ascertained results of clinical experience, but chiefly on the basis of the twin sisters, physiology and chemistry. Most of what is exact in treatment we have derived from these branches, and if medicine is ever to extricate itself from the labyrinths of uncertainties and guessings, to take a more conspicuous place as one of the exact sciences, it will be through the unerring revelations of these branches, aided of course by clinical study, and not by the whims of boasted "success," or "long experience" of any set of men however gifted by nature or honored by their fellow men. Mere dogmatic statement no matter how well supported by numbers, must ultimately yield to scientific truth.

In its royal march, science has swept aside many an ancient cobweb. Many articles once prized as medicines of extraordinary power now have no place in materia medica, and are only spoken of as monuments of the folly of our forefathers. In the light of the past history of therapeutics, who is bold enough to assert that alcohol shall not have a similar fate. We cannot close our eyes to the fact that leading scientists and foremost investigators, keep affirming and re-affirming, that alcohol is a poison under all circumstances and never remedial. Other than these we have no sure guides. The decrees of science are imperial, and when proclaimed with clearness must be obeyed, and above all, by medical men, who themselves are the devoted disciples of science, bees in the hive of research, and ever in the vanguard of progress. The proposal to abolish alcohol from our

therapeutics is revolutionary it is true, but what cares science for that. Science is a truth-seeker and never frets about consequences. Besides, the proposal is, perhaps, no more revolutionary than was the proposal at the time to abolish venesection, as a universal cure. At all events, we are in duty bound to examine closely what science and critical observation have to say on this important question.

All will admit that it is too late in the day to discuss alcohol as an article of daily regimen. No man of standing will risk his reputation by advocating such a practice. However deep-rooted as a social custom, it no longer rests on a belief in the life-giving properties of alcoholic stimulants of whatever form. The causes of the evil are to be sought in other directions. That paradoxical position, namely, the beneficial effects of alcohol under opposite conditions of heat and cold, has also been abandoned; the one by arctic explorers, and the other chiefly by army experience. Science comes forward and gives the reasons in both cases, and we find such reasons in harmony with known facts. Furthermore, it is conceded on all sides that alcohol has had too wide a range in our therapeutics in the past, and that its scientific application lies within much narrower limits. However grotesquely practice is made to harmonize with theory, there can be no doubt about a unanimity of opinion on the foregoing points amongst medical men generally. This marks a wide departure from old theories, a long stride toward the adoption of more advanced views. Notwithstanding these concessions to advanced science, the majority of medical men hold that alcohol is remedial and restorative within certain limits. The prevailing views may be succinctly formulated under two propositions, as follows: 1. Alcohol may be, and is beneficial, under conditions of temporary exposure, or sudden and unusual strain, calling for the temporary exercise of all the vital energy the system can be made to give forth, in a state of health. 2. Alcohol may be, and is beneficial, in failing vital energy, in a state of disease. In the one, life is endangered from without, and the other from within.

As before stated, many have gone so far as to banish alcohol altogether as a therapeutic agent, but we think the above propositions fairly present the views of an overwhelming majority of the medical men of the day. It is but fair to state, how-

ever, that majorities are not always safe guides. More especially is this true in a case like the present, where the question is one of science, demanding careful investigation, and perhaps, a forsaking of long-cherished convictions and deep-rooted prejudices.

Turn we now to what the scientists have to say about this question. Amongst these none is more prominent than Dr. W. B. Carpenter, who has recently been on a visit to Canada and the States. Previous to his return to England he delivered a lecture on alcohol in Tremont Temple, Boston, Mass. In a report of his utterances he is committed to the following views:

Alcohol diminishes the solvent power of the gastric juice, and any temporary increase in the quantity secreted is followed by subsequent diminution. Alcohol is prejudicial to the normal healthy life current. The introduction of alcohol changes the healthy aspect of the red corpuscles, upon the normal condition of which the system depends for its oxygen and the removal of carbonic acid. Alcohol produces an irregular outline of the corpuscles and causes them to run together in the circulation. This tendency of the corpuscles to aggregate under the influence of alcohol, interferes with the rapidity of oxygenation, and consequently with the whole respiratory process. The action of the heart is reduced from the same cause. The result of many observations discloses that alcoholic poison deranges the system. It interferes with the process of eliminating the waste matter from the system, and hence tends to the accumulation of effete matter in the blood. It checks the healthy action of perspiration. The human body is an automaton, the mechanism of which the brain has the power to set in motion. Alcohol weakens and ultimately destroys the faculty of automatonism, and intensifies the tendency towards any particular abnormal action.

Our present object being to simply pass in review the various phases of this important question, and to present with some degree of definiteness its *status*, we forbear all comment, and would only remark, that as an arraignment of alcohol, anything more sweeping than the above it would be impossible to conceive. In view of so much that is complicating and perplexing, and in view too of the weighty social considerations involved, and while awaiting fresh developments, though not called upon to abandon their use entirely, yet, it is obviously the duty of every physician, to try how long and how well he can succeed without the use of alcoholic stimulants.

THE CLAIMS OF THE PROFESSION ON THE PUBLIC.

It is an old and trite saying that "charity covers a multitude of sins," and certainly the charity which we, as physicians and surgeons, are called upon to exercise in the daily and nightly performance of our duties does cover an enormous multitude of sins—on the part of the public. It is but lately that the Assembly of France, to their honor be it said, passed an ordinance allowing to the family of a physician dying from contagious disease contracted while on hospital duty, a pension equal to that awarded to the family of a soldier dying in battle. This is a step, though a short one, in the right direction, but why did the government not grant an officer's pension in the case described? The soldier loses his life whilst in the act of destroying that of others—enemies, we grant, of his country; whereas the physician loses his in battling a far more treacherous, masked and destructive one—namely, disease. Which, may we ask, deserves the more handsome recognition at the hands of the State? It is not long since the lamented Dr. Anstie met with his death while seeking to discover the cause of an endemic, in order that he might be instrumental in preventing further loss of life. On this side of the Atlantic, but lately, a young physician received into his system those terrible *bacteria micrococci, etc.*, while saving a patient from impending suffocation by laryngo-tracheal diphtheria, by withdrawing mucus, blood and membrane from the wound left after his operation of tracheotomy. Has any one heard of a pension being granted to the families of either of these victims, or even that that cold and costly reward, a mausoleum had been erected to the memory of the deceased? I trow not!

"It was only a Doctor, who's ever ill-paid,
Cover him over with pickaxe and spade."

The poor professional cow (the term is an apt one as we are often individually termed "brutes") has, so to speak, continued too long patiently yielding the milk of human kindness and the cream of good works, and receiving therefor kicks and cuffs, instead of kindness and corn. If those who are served by that animal refuse to provide her with provender, is it not time that she began to forage for herself? Let the public be shewn that this much abused "*cow*" *habet fœnum in cornu*, and will make those who have abused her for so long a

time feel the impression of her brass-tipped horns, if her wrongs are not righted. It is about time that the big public ox received a little goring.

What one of us has not felt his angry passions rise, while listening to the speeches of candidates for the Legislature, or reading the articles of some writer whose brain was as heavily leaded as the type in which his effusions appeared, when these parties would impudently class ours with non-productive callings—such as lawyers, preachers, middlemen, and salaried officials. Now, as each farmer, mechanic or labourer gives a certain value to the State, owing to the services performed by him, is not the over-worked Doctor, who is often instrumental in raising from a sick bed and prolonging the life of one of the former class, worthy of being recognized as productive, indirectly though it be, to the State? "Providence helps those that help themselves." We, as a class have hitherto displayed too little of that *esprit de corps* so necessary to the advancement of any body of workers. Let us turn over a new leaf, or rather take one from the koran of our sister professions—Law and Divinity. Yes! even Divinity, for our reverend friends are not above looking sharply after the "loaves and fishes" while we have put up too long with barely the fishes, small and bad at that sometimes.

We have numerous able representatives in the legislative halls, why not harness them, saddle them and if necessary spur them? Our forbearance has been tried too long already. The public have come to look upon us as their slaves, not as their servants. Is not the laborer worthy of his hire? and what labourer is more worthy than he who braves wind and storm, turns night into day, and risks life and limb in seeking to prolong the lives of others? To this end we claim that an Act should be passed compelling each municipality to be responsible and to pay for all necessary medical and surgical attendance rendered to indigent persons while residing in such municipality. In order to secure this just right let us continue to agitate this question. The memorable signal run up by Lord Nelson called upon every man—not every sailor, not every soldier, not every officer alone—but every *man*, to do his duty. The medical profession has done its duty in the past, and is still continuing to do that duty towards the country; has the latter done its duty to the former? We say, emphatically, No! Then, as is the custom of the day, let us strike, as we should have struck long ago.

THE HOUNSLOW TRAGEDY.

In the early part of the month of January, W. Edwardes, of Hounslow, England, committed suicide under most painful circumstances. About fourteen months ago Dr. Edwardes purchased a half interest in the business of Dr. Whitmarsh, of Hounslow, for £1,800. He soon found, however, that the pecuniary returns which had been promised him were not forthcoming, and besides, Dr. Whitmarsh seemed anxious to make things unpleasant for his new partner, in the hope that he would leave in disgust, or accept a small sum to retire. Things went on in this way until about two months ago, when a married woman named Bignell, laid a charge of indecent assault against Dr. Edwardes. He met the charge with a prompt and emphatic denial, and the woman herself gave a written retraction of the charges, but Dr. Whitmarsh seized upon the opportunity to force a dissolution of business relations, and endeavored to force his partner to accept £500, and to give up the partnership, and threatened to go into the witness-box against him if he did not consent to the arrangement. Dr. Edwardes losing all hope of establishing his innocence under such circumstances, committed suicide by taking a dose of prussic acid. He left a letter strongly asserting his innocence of the charge brought against him by "the morbid imagination of a licentious-minded hysterical woman, and praying for a blessing on his wife, his little boys, and his mother, and ending with the words, "May God curse Michael Whitmarsh." When the particulars reached the ears of the public a mob stoned the house of Whitmarsh and levelled his surgery to the ground, and would have lynched him but for the protection of a *posse* of forty constables. The coroner's inquest resulted in a verdict, that "Dr. Edwardes came to his death from prussic acid administered by his own hand during temporary insanity," to which the jury added the following rider: That he had been driven to this act "by the pressure brought to bear by his partner, Dr. Whitmarsh using the false charge of Mrs. Bignell as a means to drive him to a dishonorable dissolution of partnership."

The investigation brought out the fact that the woman had brought a similar charge against another man two years before, and her previous history bore unfavorably on her moral character, and

also that she was instigated by Dr. Whitmarsh. That gentleman also appeared in the unenviable light of having received a large sum of money for which he did not give an equivalent, but endeavored to get rid of his dupe in order to have an opportunity of repeating the swindle with another victim.

APPOINTMENT OF HEALTH OFFICERS.

It will greatly be regretted if in appointments to the position of health officer in our towns and cities, political considerations be allowed to outweigh personal and professional qualifications. The position is one demanding special knowledge on the part of the incumbent which is not possessed by the majority of general practitioners. The rapid advance in sanitary knowledge and the varied and responsible duties of a medical health officer, are of such a character as to demand the most careful consideration on the part of those who have the appointing power. To successfully and satisfactorily discharge the duties of the office he requires a special knowledge of the subject, good executive ability and rare tact and judgment. These qualities are almost indispensable to success, and yet in how few instances are they taken into consideration in the selection of the candidates. Personal and political considerations are, it is to be feared, the main grounds upon which many of the appointments will be made. The position of health officer will in many cases be one of extreme delicacy, and if he is hampered in the discharge of his duties by consideration of friendship which may have gained him the position, his usefulness to the public will be greatly diminished. Again, he should be adequately remunerated, so as to enable him to devote his whole time to the public service; and he should also be retained in the office so long as he properly and efficiently discharged the duties, for no eligible person would be found willing to sacrifice his present prospects in practice by the acceptance of such an office, with an uncertainty as to its tenure. We trust that wise counsels will prevail, and that the best and most experienced sanitarians available will in all cases be appointed irrespective of private, personal, or political considerations.

Wohler, of Gottingen the well-known chemist is dead.

THE DANGERS OF THE PROFESSION.

The dangers of the medical practitioner being made the victim of a conspiracy has been fully demonstrated by the case reported in our last issue, which has had a further illustration in the Hounslow tragedy, and also in a still more recent case against Dr. Sparrow, of Kells, England. A young woman called upon Dr. Sparrow, complaining of morning sickness, headache and total suppression of the menses for five months. The Dr. suspected that she was pregnant, and refused to give her any emmanagogue medicine until he was satisfied that she was not in that condition. With her entire consent he made an examination which confirmed his suspicion. A few days afterwards he was summoned to answer to a charge of indecent assault. Providentially he was able to produce evidence from three visitors and three servants who were within hearing at the time, that no such outrage could have been committed. The charge was at once dismissed by the magistrates, who were convinced the whole affair was a "plot." It is gratifying to learn that Dr. Sparrow's medical brethren who were satisfied of his innocence, stood faithfully by him in his adversity.

Physicians from the very nature of their calling are unfortunately liable to such "trumped up" charges as these, and cannot be too careful to protect themselves against the whims of the hysterical and the machinations of the vicious among female patients. The only real safeguard is the presence of a third reliable person, especially when any physical examination is to be made. It is a well-known fact that the administration of chloroform or ether develops erotic feelings, which leave such a profound impression on the patient, that she is ready to swear to the occurrence of an outrage during anaesthesia; but it is probably not so well known that hysteria not unfrequently causes such a condition of the mental faculties that the patient can hardly be considered responsible for the correctness of her conclusion or the truthfulness of her utterances.

FALSE AND MALICIOUS LIBEL.

In the January number of the LANCET, we gave a correct statement of the position of Trinity Medical College in the unfortunate Kingstonian Medical School difficulty. We regret to observe

that certain indiscreet journalists are not content with a true statement of the facts, but, overcome with jealousy and envy at the great success of Trinity Medical College, and eager to defame her character, continue to repeat a malicious falsehood which first saw the light in a Kingston newspaper, to the effect that Trinity Medical College had encouraged the Kingston students in their revolt, by offering to take them for half fees, &c. As a matter of fact, neither in the telegram which was sent in reply to the students, nor in the letter of congratulation on the settlement of the difficulties sent by the authorities of Trinity Medical College, was a single word said, nor a hint given, about half fees, nor were any inducements held out to the students to leave Kingston. Any statement to the contrary is utterly and absolutely false, and without the slightest foundation in fact. Such false statements were manufactured out of whole cloth, and for a purpose which it is not difficult to surmise. They were no doubt used by the enemies of co-education as a lever to coerce the Kingston Faculty into harmony with their views. Language is not strong enough to express the mean and contemptible nature of those who originated, and also those who continue to repeat such malicious falsehoods. The publication of such statements constitutes a libel in law, and their repetition is an aggravation of the charge.

THE INTEGRITY MEDICAL AID FUND.—In another column will be found a letter calling attention to the "new departure" in medical practice in this city. We have received one of the company's circulars, and were somewhat surprised to find the names of some of the medical gentlemen who figure so conspicuously as consulting physicians in this connection. The members of the profession in this city have hitherto borne a good reputation for professional uprightness and integrity of character, and we very much regret to see such a prostitution of their high calling as the terms of this circular implies. Members who join the society are entitled, on payment of 20 cents a month for an adult, or 10 cents a month for a child, to the professional services of any one of the *eleven* medical gentlemen named; or the payment of 30 cents a month entitles to both attendance and medicine, or half that amount for a child. Thus has been inaugurated in this city, by some professional

genius who merits the highest niche in the temple of fame, a system of cheap doctoring such as probably the world has never before witnessed. *Only one cent a day for attendance and medicine.* We were in possession of some of the facts regarding the "Medical Aid Fund," a month ago, but refrained from commenting upon it at the time, believing it to have been a hoax concocted by some wag as a take-off on certain members of the profession.

LIQUOR BROM-ARSEN IN DIABETES.—Dr. Theo. Clemens of Frankfort-on-the-Main, advocates the following treatment of Diabetes Mellitus. It consists in the administration of a preparation called liquor brom-arsen, the application of electricity to the liver and other parts of the body and attention to the dietary. Liquor brom-arsen is a solution of arsenite of bromine in glycerine and water; two drops of the solution contains the 24th of a grain of the arsenite. The dose is one to four drops in some water, after meals. The dose is gradually increased until the urine shows a diminution in the quantity of sugar. It is not claimed that it will cure all cases, but great benefit may be derived even in the worst cases.

ELECTRICITY IN EXTRA-UTERINE PREGNANCY.—In the *N. Y. Med. Record*, Feb. 17, 1883, Dr. A. D. Rockwell records seven cases of extra-uterine pregnancy that were successfully treated by destroying the life of the foetus at an early period, with electricity. The cases occurred in the practice of Drs. Thomas, Emmet, Marion Sims, and others, of New York. The constant current was used with one pole introduced to the mass through the vagina, the other over the tumor, externally. The maximum current strength employed was 18 cells, or a power of 24 volts. In all of the cases recorded, the foetus was effectually destroyed, the tumor diminished in size, and the patient made a good recovery.

IRON AS A PROPHYLACTIC.—In the *St. Louis Courier of Medicine* for February, 1883, Dr. W. D. Green, of Mt. Vernon, Ill., gives his experience with tincture of iron as a prophylactic in scarlet fever, measles, etc. His observations extend over a period of five or six years, and his conclusions are, that when iron is used as a prophylactic the disease either will not appear at all, or if it

does it will be very slight as compared with patients similarly exposed, who have not used the remedy. He has great faith in the efficacy of iron in preventing or modifying the attacks of infectious diseases upon those who have been exposed to them.

BRITISH DIPOMAS.—Dr. James A. Grant, son of Dr. Grant, of Ottawa, has successfully passed the necessary examination, and was admitted a Licentiate of the Royal College of Physicians, London. R. Logan, M.D., (McGill College) of Iona, Mich., and W. A. D. Montgomery, M.D., Toronto, have successfully passed the required examination for the diploma, and were admitted members of the Royal College of Surgeons, England; and Drs. P. J. Strathy and G. S. Beck of Trinity Medical College, and J. M. Cotton of Toronto, have successfully passed the primary examination.

MENINGITES IN CHILDREN.—Dr. Vovard (*Four. de Médecine Bordeaux*, Nov. 1882) claims good results both in tubercular and non-tubercular meningitis of children from potassium iodide internally and the application of olcum tigii to the scalp. The head is shaved, croton oil applied, and after the pustules have appeared they are smeared with an irritating cerate. Hebra and others have had similar results from the application of antimony ointment.

THE DUFFERIN MEDAL.—It will be remembered by our readers that Dr. W. T. Harris, of Brantford, Surgeon of the Dufferin Rifles, won the above-named medal. The Dr. has since received the following letter from Lord Dufferin:

Constantinople, Oct. 10th, '82.

My Dear Dr. Harris.—I am much obliged to you for sending me the *Canada LANCET* and *Expositor*, announcing that you had won the Dufferin Medal. I congratulate you on your success, and am,

Yours sincerely,

DUFFERIN.

A NOVEL USE OF PEPSIN.—Dr. Hollmann (*Nederland Weekblatt*), *Med. Record*, has used an aqueous solution of sixteen grains of pepsin as an injection into the bladder of a patient who had hæmaturia, and in whom a catheter failed to empty the bladder. A few hours later a dark, viscid, fetid fluid readily escaped through the catheter.

PROFESSIONAL EXAMINATIONS.—We beg to call attention to the announcement of the Professional Examinations of the College of Physicians and Surgeons of Ontario, to be found among our advertising pages. The examinations commence in this city and in Kingston, simultaneously, on the 3rd of April, at 9 o'clock a.m.

NEPHRECTOMY.—Two cases of nephrectomy are recorded in the *New York Med. Journal*, Feb. 17, 1883; one by Dr. W. M. Polk, for the removal of a floating kidney, and the other by Dr. J. W. Wright, for chronic pyelitis. In the former case the patient died; in the latter recovery took place after a protracted illness.

LARGE VESICAL CALCULUS.—Dr. Howe of the Bellevue Hospital Medical College recently removed by the supra-pubic operation after failure by the median, a calculus weighing over eight ounces, from a lad 16 years of age. The stone measured 3 inches in its lowest diameter, and $2\frac{1}{4}$ inches in its transverse.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.—The committee having in hand the arrangements for establishing an Association Journal, has decided to set it on foot at once. It is to be a weekly, published in Chicago, and Dr. N. S. Davis has been appointed editor.

PHYSICIAN-IN-ORDINARY TO THE QUEEN.—Dr. Wilson Fox has been appointed Physician-in-Ordinary to the Queen, *vice* Sir Thos. Wilson, deceased; and Dr. Owen Rees has been appointed Physician-Extraordinary in succession to Dr. Fox.

INTERNATIONAL MEDICAL CONGRESS.—The eighth session of the International Medical Congress will be held in Copenhagen, commencing on the 10th of August, 1884.

APPOINTMENTS.—Dr. A. Worthington, has been appointed a License Commission under the License Act of 1876, for the County of Huron, (W.R.)

CORONER.—Dr. D. C. Leitch, of Duart, Ont. has been appointed coroner for the County of Kent.

Prof. Von Bischoff, of Munich, died on the 3rd of Dec. 1882, at the age of 75 years.

Books and Pamphlets.

RHEUMATISM, GOUT, AND SOME ALLIED DISEASES;
By Morris Longstreth, M. D., Philadelphia;
New York: Wm. Wood & Co.

This was the October issue of Wood's Library of Standard Medical Authors. We regretted our inability to acknowledge its reception promptly, and now that we have read it we dare hardly say that we do not regret the time expended over the perusal; not indeed that a portion of the contents is not both instructive and interesting, but that the author might, with economy, to himself, of both time and labor, and to his readers of much patience, have put into much smaller bulk all that is original or practically useful. We presume, from his name, that he is a person of foreign nationality, —probably German,—therefore to write otherwise than expansively must be an inherited impossibility. If we are right in our supposition, it must be a matter of international politeness that we abstain from criticism of the numerous violations of English grammar with which even a third-book common school boy would not fail to see that it abounds. As, however, on this continent, we seem to be pretty speedily approaching an era in which grammar will be regarded as a mere literary embarrassment, we are inclined to regard this author as a meritorious contributor to the desirable consummation of release from all such scriptorial impediments; and had Dr. L. constructed his sentences with rather less parenthetical jumblement and foreign involvement, we should have been better pleased with him. Perhaps, however, in treating of a disease so imperfectly understood as he believes rheumatism hitherto to have been, it was well that he should impart his knowledge in such a style as might give best promise of irritating and worrying his non-asthmatic readers. But let this calamity, and all similar misfortunes pass; for if those who are willing to part lovingly with Dr. L., will defer the reading of his first fifteen chapters, and precedently take up the last four, on the *Treatment* of Rheumatism and Gout, we venture to hope that they will fall back on the former with a much better relish, and will even feel resolved to avoid quarreling with him over his redundancy of padding. Indeed, the very surplusage of his display of medical erudition

must, to practitioners of advanced years, or to younger men of feeble memories, prove refreshingly instructive; for they will find in his discussion of the varieties, causes, Pathology, complications, morbid anatomy, diagnosis, etc., a very useful summary of their student days exertions: though, after disposing of all this, they may feel inclined to complain that the critical author has left them rather perplexed as to his own decided views. Truly "much study is a weariness of the flesh," and of many books the end is often the best.

LEGAL MEDICINE; By Charles M. Tidy, M. B., F. C. S., London. New York: Wm. Wood & Co.

The above work makes the November and December issues of W. Wood & Co., and it certainly does great honor to that enterprising establishment. The author has treated his various difficult subjects in a masterly manner. The style is clear and appropriate, and the structure gives evidence of cultivated scholarship and a competent knowledge of the various branches of medical science with which it was incumbent on him to be well acquainted. We presume the legal points coming under recognition have been treated of with no less accuracy and care. The first volume treats of the following very important subjects, with which every medical practitioner should be adequately acquainted.

Chap. 1st—*The process of law*; embracing Coroner's Inquest: Duties of Coroner's Jury, Post-mortem, Magistrate's enquiry, the Grand Jury, the petty Jury. 2nd—*Evidence*; embracing many sorts. Excellent advice to medical witnesses will here be found. This whole chapter is truly valuable. Chap. 2nd is an exhaustive discussion of the *Signs of Death*, and the appearances produced by it. Chap. 3rd treats of personal identity, under four important heads, comprising fifteen sections, all of which merit careful study. Chap. 4th—*The Causes of Death*. This chapter is one of capital importance. No medical expert should be unacquainted with the valuable instruction conveyed in it. Chap. 5th—*The Post-mortem*. It is our decided conviction that too many medical men are but imperfectly informed on the legal requirements of this important process, and it is easy to understand that very serious evils may result from defects in the mode of carrying it out, and the limited extent to which it is often pushed. Chap. 6th—*On Monstrosities and Hermaphrodites*. This chapter will be more interesting to the curious, than practically instructive to the medical expert.

VOLUME II.—The author here treats of a different order of cases, some of which,—as Expectation of Life, Presumption of Death, and Survivorship, are more interesting to the actuary and the legist than to the physician, though the latter may derive not a little amusing edification from contemplating some of the ridiculous, if not purely nonsensical, tenets of law, and the zigzag rulings of judges. In truth the whole code of Survivorship seems to be a scandalous caricature of natural justice, and an insult to humanity and sound reason.

The remaining subjects of this volume are *Heat and Cold*; *Burns and Scalds*; *Lightning*; *Explosives and Combustibles*; and *Starvation*, all of which are ably handled, and will be read with profit.

The whole work is enriched with an immense array of cases, drawn from the records of Courts, the reports of medical journals and other reliable sources. Among the cases quoted from medical journals it is rather gratifying to us to find one, on page 223, vol. 2, taken from the *Canada Lancet*;—"a case of enforced fasting," resulting from oesophageal stricture produced by swallowing a weak lye. The patient's weight, in ten months, decreased from 120 lbs to 60 lbs., and at death he weighed only 40 lbs. During the last seven months of life enemata of milk and eggs were all that could be given. (Vide *C. Lancet*, of Nov., 1880).

The illustrative cases adduced by Dr. Tidy in this most valuable work, will be found a truly instructive repertory of medico-legal instruction. If all the publications of Messrs. Wood were of equal merit with this one, we should regard them as bountiful benefactors to the medical profession; but infallibility in selection would be a requirement beyond the command of the most sagacious of modern publishers. It has been our rule to award praise where it is merited, and not to withhold censure where it is called for. Every other sort of criticism is but a fraud perpetrated on the subscribers to medical journals.

Births, Marriages and Deaths.

By the Rev. J. Scanlon, assisted by the Rev. R. V. McKibbin, David Wallace, M.D., of Medical, to Esther Angelina Eastman, of North Gower, Ont.

At West Malvern, Eng., on the 19th of January, Joseph Clarke, M.D., of Oshawa.

At Sherbrook, N. S., on the 3rd ult., James McG. Campbell, M.D., aged 40 years.

On the 16th ult. Joshua Chamberlin, M.D. of Frelighsburg, Que., aged 84 years.

At Parkhill on the 22nd ult. J. S. Balmar, M.D. aged 33 years.

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Original Communications.

ON COUNTER-IRRITANTS, BLISTERS, ETC.

BY ALFRED J. HORSEY, M.D., M.R.C.S., ENG.,
OTTAWA.*

GENTLEMEN,—With your permission I will submit to you a few thoughts and observations, on some local medicaments, as irritants and blisters, which have in a greater or less degree engaged the attention of each of us. The remarks that I am about to make, may to some appear heterodox, though, if they are a departure in the direction of truth you will commend them, but if not, the reverse must be your verdict. I may not tell you anything new; but, by drawing your attention to the subject, set you thinking. I hope at least just now to set you talking, so that your various experiences and opinions may be known, and the outcome be of benefit both to ourselves and patients.

It is not because I think topical applications of the class I have mentioned, to be of no service in the treatment of disease that I have chosen them for the subject of my brief and imperfect remarks, for I believe them to be the greatest comforters, as well as the greatest tormenters of humanity, but curative of disease only in a minor degree. I believe them to be as we read of them in our text books even of to-day, a most barbarous and cruel mode of treatment, sometimes attended by positive harm, often as, alas, is too frequently the case in much we do in medicine, applied in a haphazard or routine sort of way, it may be for the sake of appearing to do something, hoping at least no harm may come of them. Not that routine practice, where we are convinced that it is productive of

good, should be objected to, for much of our most useful treatment is empirical; we may not know how it proves beneficial, but for this reason will not discard it, but continue to carefully use it, hoping some day to have revealed that which is now hidden from us.

Counter-irritation, as you know, is irritation excited in a part of the body with the view of relieving a pathological irritation already existing in another part. It is one of the oldest applications of our art, being handed down to us from I don't know whom, very probably it was the first domestic remedy, a moral rubefacient, applied by the hand of mother eve, to the *glutei maximi* of master Cain, and judging from the little villian's after-career was productive of much good.

Derivation or revulsion means a centre of irritation, established in a part for the purpose of abstracting the blood and vital manifestations from some other part. Trousseau says, it would greatly embarrass us to have to say by what internal paths revulsions act; the explanations of pathology have not made the question clear, and we freely confess we have vainly sought the explanation. This mode of treatment is an attempt to imitate nature, suggested by the knowledge, that disease for reasons unknown, suddenly disappears from one part or organ of the body to appear as suddenly in another which phenomenon is known as metastasis. I think it is admitted there is such a thing though very often, that which is thought metastatic is secondary to the original disease and merely an extension of it, as is exemplified in the deposit of pus in the joints from a distant wound. The most perfect metastasis is said to take place between the parotid glands and testicles, which are likewise, said to be in sympathy one with another most intimately. Though this connection is not very apparent, it is true in a limited degree in all probability, that one disease proves curative of another, as after prolonged fevers old ulcers heal and skin diseases disappear. Glands in many morbid conditions seem to play a principal part, the brunt of the disease falling heavily upon them. For instance, many disorders manifest themselves by derangement of the glands we can see and feel about the throat, the tonsils, parotids, thyroids and others, and yet we know the *materies morbi* to be not only in these parts but generally through the system.

* Read before the Bathurst and Rideau Medical Association, Jany. 17th, 1883.

Long ago, even before the time of Brown and Broussais, it was thought that by setting up a greater extent of irritation, that a less was drained of its blood and vital phenomena and thus the part was enabled to regain its normal action. I think I am correct in stating that it is not generally thought so now, but rather that an inflamed part has the power to draw to it all the blood required to carry on the morbid changes in it, and that though a second part be inflamed it does not detract from the first. There are various other terms now almost obsolete, which signify the methods in which irritants act, or were supposed to act; such as transpositive, substitutive, spoliative, but we will not dwell on them here.

Local applications may extend their influence in more ways than one; but it is chiefly through the nervous system, the impressions being transmitted by the different nerves to their centres and thence reflected to distant parts.

Ringer says, by applying an irritation to the termination of a nerve, we excite pain and the consequent phenomena follow in their order; the irritant produces certain molecular changes, which thence extend to the sensorium, and on removing the cause of pain the molecular arrangement reverts to its original condition and the pain subsides. In every instance of pain, however produced, molecular changes must involve the nuclei of nerves or the centripetal fibres passing from them to the sensorium. Some think that pain is an exaggerated common sensation. There is no doubt that topical irritations make themselves felt in parts distant from the points of application, whether they are from the centre towards the surface or the surface towards the centre. In epilepsy we have convulsions; snuff excites sneezing; ipecac, vomiting, each sensation excites a different molecular arrangement in the nucleus of a nerve.

Let us ask ourselves are irritants curative in disease? Are they capable of doing what their long names would lead one to believe they can do? Through the sympathetic system or trophic nerves, as they are called, because they preside over nutrition and secretion, various impressions are transmitted, capable of modifying the processes in various ways and to some degree. But we cannot make them do anything we wish, even if we knew what to wish for. They are capable of performing certain functions in health, it may be presiding over a gland

that makes saliva and we cannot compel them to secrete anything else. By interfering with them, by irritants and other disturbers of the laws upon which they work, we may for a time and to some degree make them secrete a greater or less quantity, or a more or less abnormal quality; but we can never make a salivary gland secrete else than a good or bad quality of saliva. And yet we, to a part already thrown off its balance by a morbid process, seek to make it right by another foreign imitation of our own which we call art, hoping by this homœopathic treatment, out of two wrongs to make a right. And so it is with nutrition, we cannot go beyond a narrow limit in it. We can deprive the system of this or that element, or give a superabundance of this or that, but only tissues more or less normal can be produced. We may pervert, clog or even suspend action by irritants and poisons, but we can do no more.

There is no doubt, for it is daily exemplified, that counter-irritants are not only our most common but most effectual and safe means of relieving pain, whether applied in the form of mustard as a rubefacient to some painful nerve, or that of the potential cautery in painful disease of joints. And here we might ask ourselves, what is pain? Austie has poetically called it "the prayer of the nerves." It is said to depend on a molecular (electrical if you like) change in a nerve different from that of health, but of the same nature. When I said blisters were the greatest comforters of mankind I meant by their pain-relieving properties. It is thought they do so by altering the molecular arrangement in the nerve, or its nucleus or replacing it by a different one. Might it not be, in the case of the more powerful counter-irritants and cauteries, by shocking or paralyzing the nerves so rendering them unfit to carry impressions? However it is brought about, their pain-relieving properties are beyond a doubt. As to their curative powers, except indirectly in this pain-relieving quality, to my mind, they are but weak and unreliable agents.

A blister applied directly to an ulcer, in which there is deficient action or indolence, may so change it that it may readily heal—perhaps by drawing more nutriment to it, or by destroying granulations in a sore with abnormal action, as is shown by large, soft, pale, insensitive cells, and thus help it to repair. Or it may be by killing some

local parasites as the trycophyton tonsurans in tinea tonsurans or ring-worm, and in other local affections in divers ways, prove curative. But in general diseases to me they have long seemed unproductive of good, excepting by relieving pain.

In pneumonia for example, in which blistering has been used perhaps more than in any acute disease, I have failed to see any good which could be attributed to its use, but certainly much pain and discomfort if not positive harm. Dr. Inman, and others, have shown that blisters and counter-irritants applied to the chest or abdomen will, in some instances, excite inflammation of corresponding parts of the pleura and peritoneum. Again, an irritant applied to a joint distended by synovial fluid increases for a day or two the amount of fluid. The arrest of lung fever, which I regard pneumonia to be, by the application of a blister measured by feet, seems to me as irrational as to place one over the back for the cure of small-pox. If there is any disease in which a whole and healthy skin is required it is this one. The skin has been called the external lung and to damage a large extent of it as is sometimes done cannot be other than injurious. It is through it that a critical termination is sometimes brought about by profuse sweating. I once heard Bennet, by whose teaching bleeding was abandoned in this disease, and who was not much in favour of blistering say:—Inflammation of the lungs frequently terminated in one of three ways, a copious sweat, urination or expectoration.

It was once the fashion to treat pneumonia at the outset by a large fly blister hoping by revulsion to arrest the disease, but as time went on its application became more and more retarded, till, as Dr. Wood says, "it is precisely at the period when depletion, local and general, is no longer required that blisters are applicable—or, as it might be put, just as the patient has turned towards a favourable termination he is subjected to useless pain and annoyance and his recovery probably retarded by the abstraction of more or less serum which contains almost as much albumen as blood and also some fibrin. In pleurisy their benefit in my experience is very doubtful, and I think it amongst the rarest probabilities, that the amount of serum in a pleural sac can be diminished by their use.

In inflammation of the bowels it is the common practice of the day to place upon the abdomen

some active counter-irritant hoping it will in some way prove remedial. Reasoning from analogy the practice is very questionable. In burns and scalds, especially of the trunk, inflammation of the viscera is one of the most common sequences, and more especially is this the case with the bowels.

Wm. Curling, of London Hospital, was the first to call attention to the frequency of ulceration and perforation of the duodenum in scalds and burns,—not those of degree but of extent. It is superficial sores of large extent that most commonly produce them, just such an injury to all appearance as a fly blister would cause.

The foregoing remarks do not apply to the more emollient applications, liniments, rubefacients and poultices, which, by their heat, moisture and active principles are capable, with few exceptions, of doing what the more powerful vesicants are capable of without their damaging effects. And now, gentlemen, let me thank you for listening to my paper, which I shall rather abruptly close for fear what was intended for a mild rubefacient should prove a blister.

LONGEVITY IN BRAZIL.

BY JOSEPH WORKMAN, M.D., TORONTO.

If the occurrence of remarkable instances of longevity can be regarded as a sufficient indication of the salubrity of the climates in which they are observed, we may feel almost warranted in the conclusion, that our preconceptions as to the unhealthiness of some countries, heretofore generally reputed to be very inimical to human vitality, have been very erroneous. In the November (1882) number of the *Uniao Medica*, of Rio de Janeiro, a list is given of persons who had attained to very advanced ages, in the Empire of Brazil. The following is a translation from the Portuguese, of the details presented:—

"In the province of Rio Grande, south, there is a locality called Povo Novo, (young people), which should rather be styled Povo Velho, (old people), because of the long life of its fortunate inhabitants. We here present a practical demonstration of the existence of the elixir of life in this precious land: Counting 17 years of life in the last century, there is in this place a woman named Damazia de Barros, who married at 16, and lived in wedlock 70

years, and has been a widow for 15 years. From her marriage she had 11 children, of whom eight are now living; she has 48 grandchildren, 142 great grandchildren, and 20 great great grandchildren; thus showing a descendance of 218 persons, who are all now in the full enjoyment of their mental faculties. She has a son who is past 80, residing in Arroio Grande, from which he comes every year to visit his old mother, making the journey, without much fatigue, in a single day; two sisters, each over seventy, accompanying him.

In the same locality, there are, of less ages, the following persons:—Donna Maria Pereira das Neves, aged 95, and Donna Muela das Neves, aged 93, who are both industrious, and occupy themselves in domestic work. Raphael dos Santos, aged 94, who is able to do some work; Donna Marenciana da Rosa, aged 90. There are in Povo Novo an unusual number of persons, in comparison with the entire population, from 70 to 80 years old. It is there no rarity to hear of persons of 100 years or over. From 1840 to the present date the following persons have died at this advanced period: Anna Veladoa, 114 years; Maria de Barros, 113; Joao da Rosa, 113; Diego de Barros, 104; Luiza de Barros, 106; Anna da Rosa, 107; Domingos de tal, 106; Rosa Rogado, 104; Maria Joaquina da Conceico, 102; Manuel dos Quadros, 101; Caetano Silveira and his wife died on the same day, and were reckoned to have each passed 100 years of age. Donna Damazia de Barros, in spite of her 100 years, is able to work with the hoe from morning till night. Albino de Barros, her son, is 87; he resides near Arroio de Palma, 12 leagues from his mother, whom he visits every year, on horseback. The youngest son of this woman, Manuel de Barros, is 56. Mathias de Barros, the husband of Damazia, died 16 years ago. A few days before his death he shouldered a heavy burden, and trotted off with it like a strong boy. He related that he had danced at the ball given on the occasion of his wife's baptism. In this family many of the members are above 60 years old. Maria de Souza is 108; D. Monoela da Rosa is about 100; D. Maria Soares, the mother of Lieut.-Colonel J. Soares, is 95; Eugenia Nunes de Sousa, is 83; Justino Luiz de Lima is 88, and his wife is 90; Antonio Ilheo, is above 100; Polydoro Pereira died at over 100; D. Joanna Mendes died at over 100; a short time before her death she

still rode on horseback, and went out at all hours, in the exercise of her function as a midwife. Her son, Frederico M., reached the age of over 100.

Still more of the Macrobiotic sort.—Within the present year (1882), there died in the vicinity of S. Francisco de Paula, a Brazilian named Antonio José da Silveira, aged 132 years, and an African named Goncalo, aged 100, both enjoying to the end their complete faculties. There lives in the city of Porto Alegre, Rio Grande, South, in the street Riachuelo, No. 160, a lady who was born in 1773. She married at 25, the Governor D. Diego de Souza being a witness. in the year 1798; she is therefore now 109. She has the perfect use of her faculties; converses with much decision; travels on foot through the whole city, visiting many of her friends; on the day of visiting the graves, she goes to the cemetery, and returns from it on foot, and in like manner she attends the festivals of the *Menino Deus*. She numbers sons, grandsons and great grandsons. *Ditosa senhora!*"

Some of our modern Thomases may be disposed to question the accuracy of the preceding figures, simply because they do not comport with their own experience, which is a form of argument no less cogent than that of the African who denied the possibility of water becoming solid, because he had never seen frost. It is, no doubt, quite true that old people have but weak memories, and from having no reliable record of their births, or having forgotten the dates, they may fall into the error of exaggeration, and by frequent repetition become at last sincere believers in their own assertions. Some, however, of the preceding Brazilian records appear to have fair pretensions to accuracy.

HINTS ON CHRONIC CONSTIPATION.

BY T. ARNOLD HAULTAIN, M. A., PETERBORO, ONT.

Perhaps no malady of those that are popularly classed as trivial and undeserving of medical aid, is so pregnant with results destructive of the very activities most required by the class of persons oftenest afflicted with it, as Chronic Constipation. It is the sedentary man, the man who lives by his brain, that suffers most; and it is his brain, his mental faculties, that he finds chiefly impaired. Every student knows the value of a laxative dur-

ing examinations; Carneades, the most celebrated of the later Academic philosophers, I believe it was, who was accustomed to take a strong purgative before arguing against the Stoics; and I once heard of a commandant of a regiment who vowed he knew no better incentive to the invention of a new manœuvre than an anti-bilious pill.

The particular species of constipation to which I refer, is that due to the impairment of the contractile power of the muscular coat of the large intestine. So many influences tend to diminish the patient's efforts to cure this habitual form, that, in nine cases out of ten, only by spasmodic and soon-discouraged endeavors can he be persuaded to undertake remedial measures. Its persistency; the expense and trouble of procuring drugs, the use of which cannot be long continued; the perceptibly waning efficacy of many of these very drugs; the want of time to persevere daily in such mechanical contrivances as enemata, suppositories, lengthened attempts at evacuation; the absolute impossibility to the majority of sufferers—in this country at least—of procuring throughout the year such articles of diet as are almost a *sine qua non*; the inability to devote to defecation the time best suited to the system,—these are some of the causes that lead to a cessation of the employment of measures, such as, even to procure a moderate amount of success, demand untiring pertinacity. This being the case, the simpler the remedies, and the more suited to the habits and circumstances of the patient the better. I do not hesitate therefore, to suggest the following remedial—I will not as yet say curative—plan as an adjunct or auxiliary to the conventional treatment.

This is the induction of a greater number of evacuations *per diem* than that to which the patient has been accustomed. The intestinal canal has been subjected to abnormal and long-continued distension; nutrition of this organ has been diminished; its muscular fibres are probably somewhat atrophied, and the nerve *plexûses* do not fulfil their function. If then we can eliminate the causes of distension we shall have accomplished everything; and the less unnaturally the elimination is effected the better.

This augmentation of the number of evacuations may, I think, best be provoked by:—

1. Regular attempts at defecation, not only after breakfast as usual, but also after the mid-day and

evening meals; and if this last consists of 'tea,' after supper also.

2. Employment of the measures adopted or prescribed in the medicinal and mechanical treatment at times calculated so that these will exert their effects after the mid-day and evening meals, leaving the first to nature.

3. (a). The ingestion of a glass of cold water, or—better still, cold tea or coffee, before luncheon, and (b). Supplementing the last repast—which ought to be light—with a small quantity of spirits diluted with hot water. This, so common a custom amongst the lower and middle classes in England, exerts a great influence on the peristaltic action of the intestines, and is preferable—at all events to the palate!—to any stomachic.

4. Kneading the abdomen with the fingers, especially along the course of the descending colon, sigmoid flexure and rectum, while at stool, in the intervals of the expulsion of feculent matter. By these means I believe (and, I may add, not on theoretical grounds alone) the bowel may soon be made to understand that it is expected to divide its daily task of expulsion into three or more portions.

The theory on which the success of the method depends is, of course, that the colon, rectum, etc., do not become distended to the extent that they otherwise would be and are, were there only the usual single evacuation in the twenty-four hours. And it seems plausible to imagine that, the quantity of food ingested remaining the same, the amount of nourishment extracted and assimilated remaining the same, then, if the *excreta* are expelled instead of being allowed to be retained for twenty-four hours there cannot obtain that same enervating distention of the bowel.

RETENTION OF A DEAD FÆTUS FOR NINE YEARS.

BY A. D. M'GILLVARY, SYDNEY, N. S.*

It is an old saying that "truth is stranger than fiction." I submit to you the following history, extracted from my note-book, not for any very great advantage it may be to my professional brethren so much as to show how much the human system can endure at times.

* Read before the Cape Medical Society, Feb. 13th, 1883.

On the 1st of November last I was called quite a distance into the country to see a patient who gave me the following account. Her name was Mrs. J. McL., aged 36 years, has been married eleven years, her husband still living. During the first year and nine months after being married the menstrual flow was regular and normal; at that period her courses stopped, and for the next six months she had all the symptoms of pregnancy with quickening in the fourth month. About the end of the sixth month she received a severe injury in the back while driving in a waggon over a broken bridge. Immediately after the injury she was attacked with vomiting, and from that time her health began to fail. In a fortnight's time her feet and legs began to swell and the abdomen became flaccid and uncomfortable. A month after the injury she had severe intermittent pains for twenty-four hours, followed by a discharge of water and a little blood. About a month from this date she awoke in the night, flooding. A doctor (save the mark) was called, who gave some medicine and left. This flooding continued for six days, when it stopped, and a white purulent discharge began, which has continued ever since. A year after the purulent discharge began she consulted a second doctor, who gave some more medicine, and ordered vaginal injections. At the end of two years from the time the discharge of pus began, or about three years from the date of pregnancy, small pieces of bone began to come away—these continuing to pass at irregular intervals for over six years. Eighteen months ago she consulted a third doctor, who ordered injections again. At the time of my visit her condition was as follows: Pulse, 130; temperature, $103\frac{3}{4}$ —very much emaciated—and very nervous; has had hectic fever and profuse night sweats for over a year. Has had diarrhoea and vomiting for the last three months; is unable to take any solid food. The abdomen is enlarged to about the size at seven month's pregnancy. The uterus feels soft and boggy, marked tenderness on the upper portion, particularly on the right side. On making a vaginal examination I found the uterus low down, the os slightly dilated, the cervix very much hypertrophied, and the cervical canal impacted with pieces of bone, some of them deeply imbedded in the tissue. With a pair of forceps I removed some eight or ten pieces, but one larger than the

rest and high up I could not remove. I then, with difficulty, passed a gum catheter into the uterine cavity and removed three pints of most fetid pus; afterwards I washed out the cavity with a solution of permanganate of potash. I put her upon sulphate of quinine, and as the perspirations were so very profuse I gave her a solution of sulphate of atropia.

On November 3rd, accompanied by Dr. Wm. McKay, of Reserve Mines, we visited the patient. Found the pulse 120, temperature 102° ; the general condition much the same as on previous visit. From the fœtor of the discharge the air in the room was almost unbearable. I had the patient placed on a table, then passed a catheter into the uterine cavity and removed nearly a pint of thick pus, not quite so offensive as the first.

Dr. McKay then put the patient under ether, and I removed the impacted bone from the canal, that I could not remove on my first visit. My sound passed into the cavity about six inches. I found no solid body, but a mass of semi-solid material that grated on the sound as it passed through it. I immediately began to dilate the neck, using the blades of a pair of forceps as a dilator. In a short time I was able to pass a pair of placenta forceps and with them removed a quantity of broken down tissue mixed with bone. Having emptied the uterus I washed out the cavity with the permanganate solution as before. The patient came out from under the ether very slowly, she being an hour and a half under its influence. During the whole operation there was not two ounces of blood lost. The patient being placed in bed, I left the following instructions: Hot turpentine stupes to be applied occasionally to the abdomen; opium to be given if there should be much pain or tenderness, and sulph. quinine to be continued and largely increased should the temperature rise high.

November 6—Visited patient again; pulse 96, temperature 101° , general condition much improved; night sweats still troublesome, but not so bad as formerly. The abdomen was markedly reduced in size, with very little tenderness on pressure. The discharge is still copious but not so fetid. I introduced a No. 12 catheter and drew off about four ounces of very thick pus, after which I washed out the cavity as on the other occasions. I gave sulph. quinine and tinct. ferri mur., and

instead of the atropia solution I gave tinct. of ergot. This was my last visit.

Here let me draw attention to some of the difficulties I had to contend with : First, the distance from town prevented my giving the case the attention it required, and the debilitated condition of the patient prevented her removal ; it also prevented me from using the ordinary means of dilating the os uteri, and necessitated my using forcible dilatation. Had I failed in this attempt I should have had to divide the neck on either side sufficiently to pass my forceps ; yet, in the face of all these difficulties, my patient is making a good recovery. There is still some discharge ; the night sweats are troublesome at times, yet she is steadily improving, taking sulph. quinine and tinct. ferri mur. before eating, and iodide pot. with fl. ext. sarsap. co. between meals.

The lessons to be learned from this case are : 1st. The great necessity for a correct diagnosis ; 2nd. Encouragement to try, even in almost hopeless cases ; and 3rd. When instrumental interference is required, use the appliances you have at hand, even if they are not just those laid down as the proper ones. If the work is properly done success may crown the effort when everything appears to be against you.

ON THE TREATMENT OF HYDROPHOBIA.

BY J. M'CREA, M.D., CAMPBELLFORD, ONT.*

In June. 1860, I attended a case of hydrophobia near the Village of Hastings. The case terminated fatally on the fifth day after the symptoms were well marked. At the time and since, I have read much on the subject, and have studied carefully the opinions of different writers.

Dr. Watson appears to have devoted much time and talent in discussing the nature and treatment of this terrible disease ; and after giving a long list of medicines and operations together with many so-called specifics, that in time proved to be of little value, he sums up by saying that the disease once established was incurable by any known remedies, and that our efforts should be directed to the removal of the virus at the seat of injury at an

early date, and that the only safe and effectual remedy was perfect excision of the part bitten. But it is quite possible that the part bitten may be so situated that excision may be difficult or dangerous. Now, Dr. Watson, foreseeing the trouble attending such a complication, has recommended that if a general excision should be difficult or dangerous to make skewers of wood and insert a skewer into each separate tooth-mark, and then make a circular incision around the skewer, and thus remove the poison. Or, if that operation was dangerous or difficult, to wash out the wound and apply nitrate of silver.

About 20 years ago I treated two cases of bites from decidedly mad dogs. In March, 1861, I. B., aged seven years, went to the barn to call her father to dinner. As she was returning to the house a dog came from under the barn and seized the child by the leg. She was wearing short dresses at the time, and the bite was on the bare leg, making a very severe wound in the popliteal space. The cries of the child brought her father to her, and with a fork he was using at the time, he killed the dog. I was called to the case, and finding several of Mr. B.'s animals bleeding from recent wounds, inflicted as we supposed by the dog, we were disposed to think seriously of the matter. In examining the wound I found the formation of the part such that I could not see my way very clear to excision either general or on the skewer plan, and I resolved to treat her by the application of caustics. I had with me both nitrate of silver and chloride of zinc, and resolved to use the zinc. After probing the wounds to a certain their depth and direction, I washed them freely, using a male syringe, with very warm water, and continued the operation for a considerable time. I then shaved the rods of zinc into very fine points and introduced one into each separate tooth-mark, being more particular that the points were sufficiently long to reach the bottom than to their circumference. I ordered warm linseed poultices to be frequently applied, and left opium powders to allay pain and procure sleep. On the second day a profuse suppuration ensued, but not before I began to regret having placed so formidable a caustic in the immediate neighborhood of the knee-joint. The inflammation and suppuration soon ceased, the wound healed kindly, and she made a good recovery from the effects of the caustic. She has

* Read at the meeting of the Newcastle and Trent and Quinté and Cataraqui Medical Association.

never shown any tendency to hydrophobia, is married and has five children, yet Mr. B. was obliged to shoot five or six of his animals, unmistakably mad in periods ranging from 13 to 27 days.

My second case was in the month of January, 1864. T. C., a well-to-do farmer, came to consult me, having just a few hours before been bitten by his own dog. He reported that he found his dog acting strangely, worrying the animals in the barn-yard, and in the attempt to pull the dog off a sheep, the dog seized him by his hand, passing his teeth entirely through the hand between the base of the index finger and the thumb. He killed the dog, and after seeing that quite a number of his animals had been bitten, he became alarmed, fearing the dog was mad.

I gave him a full history of I. B.'s case, and advised him to submit to the same line of treatment, telling him I had every confidence that the suppuration induced by the caustic would perfectly eliminate the poison, admonishing him also of the great pain and inflammation that was sure to ensue. He appeared to dread the caustic, and begged of me to excise the part, or amputate at the wrist. I at length prevailed on him to allow me to use the caustic, which produced the usual results, causing great pain and swelling of the hand, relieved in a few days by a profuse suppuration. His hand healed satisfactorily. Mr. C has never felt any tendency to the disease, now nearly 19 years, but was obliged to kill seven of his animals in periods ranging from 15 to 74 days.

As nothing reliable has been devised with the exception of excision, and that operation being sometimes difficult, or even dangerous, and notably so in the cases I have seen, I humbly submit that if I were bitten by a rabid animal I should request to be treated by caustics, and that caustic the chloride of zinc, and would feel the utmost confidence in being free from danger from the bite.

The cases I have reported upon would probably have been cases of which Dr. Watson says: "That if he were bitten by a decidedly rabid animal upon his arm or his leg, and the bite was of such a kind that the whole wound could not be excised, my reason would teach me to desire, and I hope I should have fortitude enough to endure, amputation of the limb above the place of injury."

REPORT OF A CASE OF POLYSARCOMA.

BY J. ALGERNON TEMPLE, M. D., M. R. C. S. ENG., ETC.

Prof. of Midwifery and Diseases of Women and Children in Trinity Medical College, Toronto, etc.

Owing to the rarity of this disease I am induced to give the following brief report of a case occurring in my practice:—

On July 1st, 1881, I was requested to see a gentleman, aged 77 years, from whom I got the following history:—Two months previous to this time he was attacked with excessive pain along the course of the left sciatic nerve, which has continued up to the present in spite of medical treatment. He was advised to have some Turkish baths, and had three, which appear to have prostrated him very much. About two weeks before I saw him he noticed a great number of small, hard, painless lumps, scattered over the whole anterior surface of the abdominal wall, accompanied by great weakness but no pain. The day I saw him, his pulse was 112, temperature 99.2; skin hot and dry; countenance anxious and haggard, tongue coated, bowels constipated, entire loss of appetite, restless, wakeful, despondent, considerable emaciation, accompanied by great weakness, and inability to walk without assistance. The whole abdominal surface was studded over with a great number of small hard subcutaneous tumors, varying in size from a buckshot to an almond, movable, colorless, and painless. Some of them were attached to the skin on their summit. A considerable number were also present in the groins, and both axillæ. I searched over the whole of the remaining part of the body and found but one on the left forearm. I concluded I had a case of Polysarcoma to deal with and gave an unfavorable prognosis. The symptoms of emaciation and weakness continued to increase, and he became comatose and died on the 5th September. The treatment pursued was chiefly of a tonic character with good diet. I also gave him chian turpentine. Diarrhœa and vomiting came on a few days before death. The tumors were never painful but he constantly complained of soreness and heat within the abdomen. After death I removed several of these small tumors and sent some to Dr. Osler, of Montreal, and Dr. Sheard, of Toronto, for microscopical examination.

Dr Osler writes me as follows :—"I have examined the specimens, which appear to be of the nature of a round-celled sarcoma *i. e.*, a tumor composed almost entirely of round cells about the size of colorless blood corpuscles, with very little stroma, only sufficient for the support of the vessels. In places there were a few giant cells but they did not form a special feature in the growth" Dr. Sheard's report was substantially the same, viz: that these growths were malignant and that the case was one of polysarcoma.

The family history of deceased was unexceptionally good, there being no evidence of cancer or allied disease. His previous health had always been very good. I regret I was prevented by the family from making a post mortem examination.

The Committee of the American Medical Association, appointed to arrange for the publication of an Association journal, have recommended the undertaking.

Reports of Societies.

BRANT CO. MEDICAL ASSOCIATION.

The above society held its regular quarterly meeting in Brantford on March 6th the President, Dr. Clarke, in the chair. An unusually large attendance of members from the county and city were present. The minutes of last regular meeting were read and confirmed.

Dr. Winskill read a paper on "Traumatic-Meningitis," which originated in an injury to the ear. A discussion followed in which Drs. Griffin, Burt and Harris took part.

Dr. Griffin related the history of, and the treatment pursued in three cases of fracture of the neck of the femur which had occurred in his practice during the present winter.

Dr. Harris then gave post mortem notes of "Disease of the Kidney." The organ was enlarged from its normal size of a few ounces to about eight pounds, and showed evidence of malignant disease.

The following gentlemen were appointed a committee for the purpose of urging upon the proper authorities in the city and county the necessity of procuring hospital advantages for the place: Drs. Burt, Henwood, Harris, Marquis, Winskill, Philip, Kitchen and Griffin.

The society adjourned to meet at Paris on the first Tuesday in June next.

Selected Articles.

FREQUENT REPETITION OF DOSES.

BY A. A. SMITH, M. D., BELLEVUE HOSPITAL.

GENTLEMEN,—I propose to direct your attention this morning to the subject referred to at my last lecture, namely, the frequent repetition of doses. This subject is a very important one, and one regarding which it is very difficult to establish any arbitrary rules. In the case of chronic diseases, where it is necessary to continue the treatment for a long time, the plan of administering the medicine in larger doses at intervals of five or six hours is probably the best one which can be adopted. For example, if you were prescribing some preparation of iron in a case of anæmia, it would be unnecessary to give it oftener than three times daily. Again, in certain cases it may be desirable to produce the full effect of the drug at a single dose, as in the administration of a cathartic, or of quinine to reduce temperature.

In other cases, however, it is desired, in administering medicinal remedies, to keep up their continued effect, and the question arises, whether we can accomplish this purpose better by giving them in smaller doses at frequent intervals than by giving them in large doses at much longer intervals, the total amount of the drug in the end being, perhaps, the same in either case. It is a fact with which you are acquainted that certain drugs become absorbed and produce their effect upon the system in a very short time, and they may also be eliminated very rapidly, while others act slowly and are eliminated after a longer interval.

The first drug to which I would call your attention in connection with the subject of the lecture is the chlorate of potash. It may not be unknown to most of you that this drug has at times been administered in sufficiently large doses to produce a dangerous inflammation of the kidneys. Special attention has been called to this fact by Dr. Jacobi, of this city, and also by other authors. This danger can be avoided by administering the drug in small doses frequently repeated. In writing the prescription, a teaspoonful of the solution may be made to represent as much of the drug as you wish to give; or, if it be in a more concentrated form, the patient may add water to it. Grain doses given every half-hour in scarlet fever, diphtheria, tonsillitis, etc., will produce the same results as larger doses, without the danger of the evil effects resulting from the accumulation of the drug in the system, as sometimes happens when it is administered in the ordinary way. Indeed, I believe they will produce better results on the throat inflammations.

For the treatment of neuralgia, croton chlora

has for a long time been given in large doses, as from five to eight grains, repeated every two hours, until fifteen grains are taken. But allow me to suggest what I consider a better mode of administering the drug—that is, to give a grain of it, prepared as you please, either in liquid or pill form, every half hour until the neuralgic symptoms are relieved. A solution of which a teaspoonful represents a grain of the croton chloral may be made, having scarcely any of the bad taste which usually belongs to this medicine when given in large doses. I may here remark that one of the important advantages connected with the frequent repetition of doses is the fact that the medicine may be so largely diluted with water or other vehicle as to be rendered comparatively tasteless, and harmless to the mucous membrane of the stomach.

You will often be called upon to treat very obstinate cases of urticaria, and you will be put to your wits' end to know what to do. The plan ordinarily suggested is to give alkalies, as the bicarbonate of sodium, or magnesium; but, if you will give the patient two grains of the salicylate of sodium every hour or half-hour, you will usually be enabled to effect a cure even in obstinate cases, except those of a chronic nature. Two grains of the salicylate of sodium administered in a teaspoonful of water is almost tasteless, and may be given without producing disturbance of digestion. Urticaria is often caused by the administration of full doses of balsam of copaiba in cases of urethritis, or inflammation of other mucous membranes, and it may seem strange to you when I make the statement that a single drop of the same drug given every half-hour will sometimes control urticaria. I have no explanation to offer, but I make the statement not alone upon the authority of others; I myself have often observed the efficacy of the treatment, although not so frequently as in the treatment by the salicylate of sodium.

Fowler's solution, or the liquor potassii arsenitis, half a drop given every half-hour for six or eight doses, will often relieve the vomiting which occurs after a debauch. It will also relieve the morning vomiting of drunkards, and is of decided benefit in the sympathetic nausea and vomiting of pregnancy.

Jaborandi has been given in large doses with a view to exciting perspiration in cases of Bright's disease, but the very serious objection has been found to its administration in this manner, that it sometimes has a very depressing effect upon the heart's action, resulting in some cases fatally. Now, five to ten-minim doses of the fluid extract of jaborandi given every hour or half-hour will produce marked perspiration without causing any unpleasant effects upon the heart. I sometimes combine with the jaborandi the tincture of digitalis, with a view to counteract any possible evil in-

fluence which the former drug may have upon the heart. So dangerous do I consider large doses of jaborandi that I often hesitate long before administering it, especially in the uræmia of the puerperal state.

The next preparation of which I shall speak is a solution of the sulphate of atropine, one-hundredth of a grain in a goblet of water, a teaspoonful of which shall constitute a dose, amounting in all to about sixty doses. Now, you will often be called to see cases of supposed croup, but which, in the majority of instances, prove to be cases of false croup of a reflex origin. Ordinarily, you will be able to relieve these patients by giving them a teaspoonful of this preparation every hour. It is possible the remedy acts slightly as a stimulant of the respiratory centre; it is also possible that it has some influence upon muscular contraction or relaxation; at all events, clinical experience proves that it is of benefit in these cases. The dose may be repeated every hour or half-hour, according to the severity of the attack. If the child's face begins to flush and show signs of the physiological effects of the drug, the dose can be reduced in frequency. It should be remembered that when thus administered the equivalent of a full dose of the drug will soon be reached. Do not forget in these cases to give an emetic if there is anything in the stomach which may be causing the spasm, or a cathartic if there be reason to suspect intestinal disturbance as the cause.

The bromides are largely used in the treatment of the nervous and febrile disturbances of children, but an objection to them is the fact that the little patients do not take them readily, because of the taste; the bromide of sodium is, perhaps, as little disagreeable as any of the preparations. This objection can be avoided by giving small doses frequently repeated; for instance, a few grains dissolved in half a tumbler of water, a teaspoonful representing a half-grain, or a grain even, administered every ten or fifteen minutes. When given in this manner, the bromides often prove of great benefit in the nervous disturbances arising from dentition and other causes, and in relieving the fever which, in children, usually attends a slight degree of excitement of any kind. I have seen an elevation of the temperature in children where it could not be traced to any other cause than the excitement incident to their afternoon play. A temperature which might indicate a sickness of considerable gravity in the adult, if it occur in a child may be of comparatively little importance. In such cases the bromides, administered in small doses, say a grain or two at intervals of ten or fifteen minutes, will often prove of great benefit.

You will often meet with children of a nervous, excitable frame of mind, who are, perhaps, naturally of a sensitive, nervous temperament, who are disturbed by the slightest noise, and are unable to

go to sleep before ten or eleven o'clock at night. In such cases you will find it necessary to give a nervous sedative. An excellent effect will be produced by chamomilla in some one of its forms, as the tincture, administered in minim doses, every fifteen or twenty minutes. It is a tonic as well as a sedative. It is a better sedative in such cases than the hydrate of chloral, which is liable to affect the digestion. It is harmless when given in larger doses. Put a teaspoonful into a half-tumblerful of water, and let the child drink it freely.

One of the most important remedies which can be administered with great benefit in frequently repeated doses is ipecac. You are aware that a teaspoonful of the syrup of ipecac is likely to produce emesis; but it is always a fact, regarding which I was at first quite skeptical, that a single drop of the wine of ipecac will often arrest obstinate vomiting. It should be repeated every ten or fifteen minutes. When administered in this manner, I have often known it to relieve vomiting from different causes, among which are pregnancy and subacute gastritis. Children often vomit from very slight causes, and are liable to suffer from diarrhoea and vomiting which have no other assignable cause than disturbance of digestion. A single drop of the wine of ipecac, repeated every fifteen or twenty minutes, will often produce the most marked relief, both from the vomiting and from the diarrhoea. Administered in this manner, the drug is not nauseous, and is easily taken.

I now make a statement, upon the authority of Trousseau and his enthusiastic successor, which may appear to you, as it once did to me, incredible—viz., that one sixtieth of a grain of calomel taken every hour for ten or twelve hours will relieve the headache of syphilis occurring at night. I have administered it in one fortieth-grain doses in this manner and have obtained the results which they claimed for it, but I have not yet tried it in sixtieth-grain doses. The relief was very marked by the second or third night. It is not intended to take the place of iodides which are given in such cases. Doubtless the calomel, when administered in such small doses, is all taken up into the system.

Nursing children often vomit or regurgitate their food; this has been relieved repeatedly in my experience by giving them a teaspoonful of a solution of one grain of calomel to the pint of water every ten or fifteen minutes. In order to dissolve it, the calomel should first be put into an ounce of lime-water, and then into the pint of pure water. One twenty-fourth of a grain of mercury with chalk, administered every fifteen or twenty minutes, is often of great benefit in the vomiting and non-inflammatory diarrhoea of children. Where the diarrhoea is accompanied by mucous passages, indicative of a certain degree of inflammatory action, or enteritis, benefit will be derived

from the administration of one teaspoonful of a solution of bichloride of mercury (corrosive sublimate), one grain to the quart, every hour. The dose may seem very small, but it must be remembered that the dose for an adult is only one-sixtieth to one-thirtieth of a grain, and, when administered in this manner, the full dose for a child is reached within a few hours.

For the diarrhoea of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but not true dysentery, five drops of castor-oil, given every hour in water with sugar and gum, is an excellent remedy.

Another extraordinary statement, which at first seemed to me to be fabulous, and may seem so to you, but which, nevertheless, you will find to be based upon clinical facts: Put a grain of tartar emetic into one quart of water; teaspoonful doses of this solution every half-hour will prove effectual for the relief of the wheezing and cough accompanying a slight bronchitis in children.

It is well known that cantharides, when given in large doses, is liable to cause inflammation of the urinary tract; but it has been found that a single drop of the tincture every hour will in many cases relieve vesical catarrh.

You probably have heard that digitalis has been used in cardiac disease. Certainly if you have not heard of it you will, and, if you have already heard of it, you will hear of it again, particularly at the clinics. Ordinarily, it is administered in considerable doses only three or four times a day, but I do not hesitate to say that the frequent repetition of small doses will produce much more benefit than larger doses at longer intervals. A single drop of the tincture of digitalis, given to a patient suffering from symptoms due to organic heart disease when digitalis is indicated, administered at intervals of an hour or half-hour, according to the severity of the symptoms, will often give greater relief than larger doses, and without liability to ill effects.

A gentleman of this city, of authority in the specialty of venereal diseases, says he has given greater relief in a short time, in cases of orchitis and epididymitis, by the administration of two-minim doses of the tincture of pulsatilla every hour than by any other mode of treatment. I can testify to the great benefit derived from the drug administered in this manner in dysmenorrhoea not of a membranous, obstructive or neuralgic character.

One of the most distressing symptoms from which many women suffer at the menopause is flatulence, and a sensation of fluttering or palpitation at the pit of the stomach, an effectual remedy against which is the extract of calabar bean in one-fiftieth-grain doses, repeated every half-hour for six or eight doses. It may be repeated in the same way after stopping it for three hours.

In cases of amenorrhoea not dependent upon

anæmia, benefit may be derived from minim doses of the fluid extract of ergot administered every half-hour for five or six hours the day before the flow should begin, and again on the day on which it should occur. Contradictory as it may seem, when administered in the same manner the fluid extract of ergot is of benefit in cases of excessive menstruation.

Aconite is one of the drugs to which you will probably have occasion to resort frequently when you enter upon the active practice of medicine. It has for a long time been used in quite small doses, but not so frequently repeated as it might be with benefit. There are many cases of febrile movement, with dry, hot skin, a full, bounding pulse, the mucous membrane of the throat and nose probably dry—cases in which the febrile movement is not the commencement of one of the continued fevers; the tincture of aconite, one-third to one-half a minim, given every fifteen minutes, will be found of decided benefit. Visiting the patient shortly after the commencement of this treatment, you will often find him in a little perspiration; the medicine may then be administered at longer intervals, every half-hour or longer, according to the indications. The tincture of aconite, administered in a similar manner, is also useful in cases of commencing so-called cold in the head. It is likewise useful in cardiac hypertrophy with palpitation, severe headache, and disturbances of the nervous system due to increased force of the heart-beat.

Two minims of the tincture of hamamelis every half-hour will often control hæmorrhages. I was at first inclined to look upon this statement with a great deal of distrust, but I have since tried it in cases of hæmorrhage from the nose, from the uterus, and in the hæmorrhage from hæmorrhoids, and have found it of great benefit.

The tincture of belladonna in minim doses, given every half-hour, is a good remedy in cases of nasal catarrh and bronchitis accompanied by free secretion. You should cease to give the drug for a while after eight or ten doses have been administered, as it is less quickly eliminated from the system than the other medicines of which we have already spoken. In cases of pulmonary œdema with failure of heart power, belladonna thus administered is of benefit in retarding the exudation of serum, and in overcoming the failure of heart power.

Two grains of the chloride of ammonium, combined with ten or fifteen minims of the tincture of cubebs, given every half-hour, oftentimes controls acute pharyngitis and superficial inflammations of the other tissues about the throat. For inflammation of the throat dependent upon a gouty diathesis, add to this mixture ten minims of the ammoniated tincture of guaiac, and administer very hour.

In the headache of migraine, one grain of the citrate of caffeine given every half-hour will often produce most marked relief. In neuralgias about

the face or head, three-minim doses of the tincture of gelsemium every half-hour will often act almost miraculously and leave no ill effects. A single drop of the tincture of nuxvomica given every ten minutes will often produce most marked relief in sick headache not of a neurotic origin. It should be given immediately after or soon after meals. For certain kinds of headaches (especially those which are periodical and not of malarial origin), fifteen-minim doses of fluid extract of guarana given every fifteen minutes will very frequently relieve. If it does not relieve in four doses, increase the dose to thirty minims.—*N. Y. Med. Journal.*

THE TREATMENT OF ACUTE RHEUMATISM.

BY DR. ROBERTS BARTHOLOW (*Medical Record* :)

No one can give anything like attentive consideration to the types of rheumatic cases without perceiving that they may be resolved into three groups, as regards the characteristics of the individuals composing them :

1. Spare persons of considerable bodily vigor, good muscular development, and having a distinct family history of neurotic or rheumatismal disorders.

2. Obese subjects, addicted to malt liquors and good living, sometimes with—more often without—an inherited predisposition to rheumatic diseases; the gelatinous descendants of albuminous parents, as they have been entitled.

3. The feeble, pale, anæmic subject, depressed by poor diet and evil hygienic surroundings, including dampness and bad air.

No one can treat cases of rheumatism successfully unless he recognizes the type before him and adapts his remedies accordingly.

The first type is comparatively frequent and found amongst the best elements of our mongrel population. Besides the inherited tendency, such subjects are prone to indulge in a rich diet of animal food, sauces and wines, and to pursue rather sedentary occupations, or an in-door life. In these cases, salicylic acid, or the salicylate of soda, renders an incontestible service. There are, however, some practical details regarding its administration of great moment in respect to the permanency of the results. It is quite certain that in this group of rheumatic cases, full medicinal doses of salicylic acid, or of the salicylates, will speedily arrest the pain and diminish the fever. The lowering of the temperature seems to bear a constant ratio to the diminution of the pain. It is not possible to express in figures with exactitude the doses necessary; the curative effect is attained by that quantity which reduces the pain and the tem-

perature. In suitable cases, the administration of this remedy removes all of the more prominent symptoms and establishes convalescence in three or four days. Unfortunately, in a considerable proportion of cases, the disease manifests a strong tendency to relapse, after a marked subsidence of the acute symptoms which apparently indicates the beginning of convalescence. A rule of practice has been distinctly formulated since this tendency to relapses has become well known. It is this: Give the remedy for several days after the acute symptoms have ceased. I have attempted, from my own experience, to give numerical expression to this rule, with the following result:

Salicylic acid, or the salicylates, should be given after the subsidence of the acute symptoms, and the cessation of the fever and pain, for the same number of days as the acute attack lasted. Thus, if the decline of fever and pain occurred on the fourth day, the remedy should be continued as many days thereafter, or for four days subsequent to the apparent cessation of the acute symptoms.

The second class of rheumatic subjects contains the obese, or those of full habit, the rotund addicted to malt liquors and to good living, all of whom are apt to suffer from a form of acid indigestion. The cases of rheumatism occurring in such subjects are, as a rule, much benefited by the alkaline treatment. This method is an empirical attempt to cure a disease characterized by an excess of acid in the various secretions. Dr. Fuller, the author of an excellent work on rheumatism, has been the most prominent advocate of the alkaline method.

"By the 'alkaline treatment,'" says Dr. Fuller, "I mean a plan of treatment in which alkalies play an important part, but which consists not only in the administration of alkalies, ($1\frac{1}{2}$ ozs. in 24 hours) but in the careful regulation of the secretions, the strictest attention to diet, and the administration of tonics, such as quinine and bark, as soon as the patient can bear them. As soon as the urine, when freshly voided, ceases to show an acid reaction—which is usually the case after twenty-four hours—the quantity of the alkali is diminished by one-half, six drachms only being administered during the succeeding twenty-four hours. At the expiration of that time, if the urine remains alkaline, three drachms only are given in the next twenty-four hours; and on the fourth day, if the urine still shows an alkaline reaction, the form of the medicine is altogether changed. The treatment ceases to be essentially alkaline; either a cinchona draught is ordered to be taken three times a day, containing a scruple or a half drachm of bicarbonate of potash—a little more or a little less according to the condition of the urine, which should be kept nearly neutral—or three grains of quinine dissolved in lemon-juice is given three times a day in effervescence, with half a drachm of bicarbonate of potash or soda."

The third case of rheumatic cases, and numerically the most important, probably, also pathologically, the most serious, is the feeble and anæmic subject. A rheumatic of this kind is pale, rather thin, the muscles weak and wanting in firmness, the chest narrow and somewhat flat, the joints prominent and lax. In such persons an extension of the rheumatic inflammation from joint to joint, until almost all the joints of the body are involved, is to be feared, as it is of frequent occurrence. Cardiac complications are relatively frequent. It need hardly be observed that in such subjects the depressing effects of salicylic acid and of the alkalies are to be dreaded. Here clinical experience is in entire accord with theory. We owe to Dr. Russell Reynolds, of London, the introduction of a remedy for acute rheumatism, which is especially suited to this group of cases. I refer to the *tincture of the chloride of iron*. To be effective it must be given in full doses—from 3 ss. to 3 j. in sufficient water every four to eight hours. It lessens the swelling and pain of the joints, lowers the fever, diminishes the tendency to heart complication, and, above all, sustains the vital powers in their struggle against the encroachments of the rheumatic disease.

I am far from denying that cases of rheumatic fever in these anæmic subjects would not be relieved by salicylic acid, but I do affirm that so much depression would result that relapses would occur, and the convalescence would be prolonged owing to the remarkable depression of the nutritive functions. The same state of things results from the administration of alkalies. The blood is spoiled, the heart enfeebled, and complications of various kinds invited. On the other hand very conspicuous benefit results from the vigorous administration of the tincture of iron. Besides its influence over the course of the disease—shortening its duration by checking waste, and preventing complications by maintaining the vital resources—the tincture of iron, as shown by the late Dr. Anstie, has a distinct prophylactic effect, so that, when the attack is threatened, will, by timely administration, prevent it.

During the period of convalescence from acute rheumatism, after the treatment by salicylic acid and by alkalies, the tincture of iron in the full doses already advised renders an important service. The tenderness and effusion about the affected joints, the subfebrile temperature, and the condition of anæmia, are alike greatly improved by its administration in efficient doses. I have repeatedly observed that cases which lingered long on the hands of the physician after the acute symptoms had subsided, quickly improved and recovered when efficient doses of the tincture of iron were administered, and, at the same time, suitable blisters were applied to, or about, the affected joints.

Independently of the considerations above ex-

pressed regarding the utility of blisters, the "blister treatment" of acute rheumatism is deserving of careful consideration. Blisters in various ways, and applied in accordance with various notions, have long been used in the treatment; but the "blister treatment," properly speaking, of acute rheumatism has been systematized by Dr. Davies, of the London Hospital, and Dr. Dechilly, of France. The latter, however, applied a large blister to cover the joint, and permitted it to remain on until sufficient inflammation occurred to produce abundant serosity. Dr. Davies, on the other hand, was content to apply the blisters around rather than on the joint itself. It is a remarkable fact that blistering brings about a neutral or alkaline condition of the urine, how acid so ever it may have been before the blisters were applied. More or less strangury occurs in some instances. So remarkable is the relief to pain produced by the blisters that patients petition for their renewal from time to time. Cardiac complications are comparatively infrequent, and the duration of the disease is reduced to the limits of the favorable cases. Indeed, I may sum up the testimony as to the efficiency of this method in the words of Dr. Greenhow, who affirms that the treatment of rheumatism by blisters is quite as successful and less objectionable than by salicylates. The good effects of the blister treatment afford a strong justification of the neurotic theory. When first ascertained, the result was ascribed to the withdrawal of a quantity of acid serum from the neighborhood of the affected joints. The change in the character of the urine, induced by successive blisters, rendered further explanation necessary. The increase of our knowledge respecting the influence of peripheral irritation on the state of the nerve-centres, and especially on the trophic system, has paved the way to a better appreciation of the facts; nevertheless the final explanation remains to be made. A combination of the blister treatment with salicylic acid, with alkalies, or with the tincture of iron, may often be made with signal advantage.

The importance of a proper diet is not less than is stated by Dr. Fuller in the quotation made from his paper. Solid food should not be allowed in any case. Liquids composed of starchy and saccharine matters are only less hurtful. Milk and animal broths are the articles to be depended on chiefly until the cessation of all joint troubles will permit the gradual restoration of a solid dietary. Lemonade and carbonic acid water are allowable, unless they produce flatulence, when they will excite fresh joint mischief. Anodynes are to be avoided if possible; when necessary, atropine is preferable to morphine, if adequate to relieve the pain, which it usually succeeds in doing. The complications which may arise in the course of rheumatic fever demand more careful treatment than I can give them at the conclusion of this article.

THE "WEIR MITCHELL" TREATMENT OF HYSTERIA AND ALLIED DISEASES.

Dr. W. S. Playfair concludes an interesting and quite exhaustive article on this subject as follows:

The principal elements in the systematic treatment of these cases are—

1. The removal of the patient from unhealthy home influences and placing her at absolute rest.
2. The production of muscular waste and the consequent possibility of assimilating food by what have been called "mechanical tonics," viz: prolonged movement and massage of the muscles by a trained shampooer, and muscular contractions produced by electricity.
3. Supplying the waste so produced by regular and excessive feeding, so that the whole system, and the nervous system in particular, shall be nourished in spite of the patient.

On each of these I shall offer one or two brief observations:

1. The removal of the patient from her home surroundings, and her complete isolation in lodgings with only a nurse in attendance, is a matter of paramount importance. This is a point on which I am most anxious to lay stress, since it is the great crux to the patient and her friends; and constantly appeals are made to modify this, which I look upon as an absolute *sine qua non*. I attribute much of the success which I have been fortunate enough to obtain in my cases to a rigid adherence to this rule. In almost every instance of failure in the hands of others of which I have heard, some modification in this rule has been agreed to, in deference to the wishes of the friends—as, for example, treating the case in one room by herself in her own house, or in admitting the occasional visits of some relatives or friends. While, however, the patient is to be rigidly secluded, it is incumbent to secure the attendance of a judicious nurse, with sufficient intelligence and education to form an agreeable companion. To shut up a refined and intellectual woman for six weeks with a coarse-minded, stupid nurse can only lead to failure. I have had more difficulty in obtaining suitable nurses, sufficiently firm to insure the directions being carried out, and yet not over-harsh and unsympathetic, than in any other part of the treatment. Whenever my case is not doing well, I instantly change the nurse—often with the happiest results. In adding to the isolation the patient is put at once to bed, to secure absolute rest. In many cases she is already bedridden; in others there has been a weary, protracted effort, and the complete repose is in itself a great gain and relief.

2. Under the second head comes systematic muscular movement, having for its object the production of tissue waste. This is administered by

a trained rubber, and here again is a great practical difficulty. The so-called professional rubbers are, in my experience, worse than useless, and I have had to teach *de novo* a sufficient number of strong, muscular young women; and the aptitude for the work I find to be very far from common, since a large proportion of those I have tried have turned out quite unsuited for it. I cannot attempt any description of this process. I need only say that it consists in systematic and thorough kneading and movements of the whole muscular system for above three hours daily, the result which at first is to produce great fatigue, and subsequently a pleasant sense of lassitude. Subsidiary to this is the use of the faradic current for about ten to twenty minutes, twice daily, by which all the muscles are thrown into strong contraction and the cutaneous circulation is rendered excessively active. The two combined produce a large amount of muscular waste, which is supplied by excessive feeding; and in consequence of the increased assimilation and improved nutrition, we have the enormous gain in weight and size which one sees in these cases, it being quite a common thing for a patient to put on from one to two stones in weight in the course of five to six weeks. The feeding, at regular intervals, constitutes a large part of the nurse's work. At first from three to five ounces of milk are given every few hours; and for the first few days the patient is kept on an exclusive milk diet. By this means dyspeptic symptoms are relieved, and the patient is prepared for the assimilation of other food. This is added by degrees, *pari passu* with the production of muscular waste by massage, which is commenced on the third or fourth day. By about the tenth day the patient is shampooed for an hour and a half, twice daily; and by this time is always able to take an amount of food that would appear almost preposterous did not one find by experience how perfectly it is assimilated, and how rapidly flesh is put on. It is the usual thing for patients to take, when full diet is reached, in addition to two quarts of milk daily, three full meals, viz: breakfast, consisting of a plate of porridge and cream, fish or bacon, toast and tea, coffee and cocoa; a luncheon, at 1 p. m., of fish, cutlets or joints, and a sweet, such as stewed fruit and cream, or a milk pudding; dinner at 7 p. m., consisting of soup, fish, joints, and sweets; and, in addition, a cup of raw meat soup at 7 a. m. and 11 p. m. It is really very rare to find the slightest inconvenience result from this apparently enormous dietary. Should there then be an occasional attack of dyspepsia it is at once relieved by keeping the patient for four and twenty hours on milk alone.

Such is a brief outline of the method to which I am here to direct your attention. As to the results, I have already published several remarkable illustrative cases, so that it is perhaps not neces-

sary to do much more in this direction. I may say, on looking back at my cases, that the only ones with which I have any reason to be disappointed are those in which the primary selection has been bad; and in the few in which the results were not thoroughly satisfactory, I had doubts as to their suitability for the treatment, which I expressed beforehand. These include one case of chronic ovarian disease, and one of bad ante-flexion with fibroid enlargement of the uterus, in both of which the local disease prevented any really beneficial result. In the third I had to stop the treatment in a week, in consequence of cardiac mischief; two others were cases of positive mental disease, and in one case there was true epilepsy. I have no doubt that any positive coexistent organic disease of this kind should be considered a contraindication. In my other cases the results have been all that could be wished, and in many of them the patients have been restored to perfect health after having been helpless, bedridden invalids for years; in one case twenty-three without ever putting a foot to the ground, in others sixteen, nine, six, and so on. In two instances my patients were in such a state that it was found absolutely impossible to move them except when anesthetized; and they were brought to London by the medical men long distances under chloroform, in each case leaving in six weeks perfectly cured.

HIGH FORCEPS OPERATION.

BY PROF. BRAUN.

A case of the high operation which Prof. Carl Braun performed upon Wednesday, November 8, before the class will serve to convey the teachings of the Vienna School upon a number of important subjects in relation to the use of forceps.

The patient, a native of Austria, unmarried, thirty-two years old, in her fifth pregnancy at full term, felt labor pains towards the evening of November 7, and entered the lying-in ward of the First Obstetrical Clinic at 2.30 A.M. November 8. Abdominal palpation revealed pregnancy at full term, a large child, head presentation, first position. Heart tones were loud and regular. By combined external and vaginal examination a contracted pelvis was demonstrated. The measurements were:

Distance between the anterior and superior spine,	21½ cm.
Distance between the iliac crests,	25½ "
" " trochanters,	30½ "
External conjugate diameter,	18 "
True " " " " " "	8½ "
Abdominal circumference,	82 "

The os became fully dilated at 5 o'clock A.M., and the rupture of the bag of waters occurred

some moments later. The head engaged in the superior strait and advanced very slowly until a segment of one-third its volume was within the pelvic cavity. The head now became firmly fixed, with the sagittal suture in the transverse diameter, and a considerable caput succedaneum began to form. The corpus uteri continued to contract powerfully, at regular intervals, without effecting in the slightest degree any change in the position of the head, while the collum uteri became distended, and finally reached to the umbilicus. Later the condition of tetanus uteri was observed, and the corpus uteri could be felt as a firm hard tumor above the umbilicus, very sharply differentiated from the distended, relaxed collum uteri, situated below. At 11.30 o'clock A.M., the woman received a hypodermic injection of morphia, and at 12.30 o'clock P.M., she was taken into the lecture-room for the application of the forceps.

Prof. Braun, after careful disinfection of his hands by liberal use of a 3 per cent. solution of carbolic acid, 10 per cent. solution of potassium permanganate, a solution of hydrochloric acid of similar strength, green soap and a brush, examined the woman, and confirmed the diagnosis previously made in the lying-in ward. He said the child would weigh more than 3500 grammes, and would have a greater length than 50 cm. After catheterization, the vagina and external genitals of the patient were copiously irrigated with a 3 per cent. solution of carbolic acid, immediately before the application of the forceps.

While Prof. Braun is in no sense of the word a strict disciple of Lister, he is no disbeliever, and always gives his patient the benefit of a doubt, with the exception of the spray. In passing, it may be mentioned that careful irrigation with disinfectant fluids was employed under his direction long before Esmarch called public attention to the subject.

For the operation, Prof. Braun selected his own instrument. This is the long forceps of Sir James Simpson, with the fenestræ closed by a thin metallic plate (Hohl's modification), the whole instrument, including handles, being covered by a thin layer of hard rubber. The weight of the instrument is 600 grammes.

The advantages claimed for the instrument are:

1. The impermeable, smooth surface.
2. The easy, antiseptic cleansing, because septic material finds no lodgement in any groove.
3. The durability, because hard rubber resists rust, chloroform, chloride of iron, carbolic acid which is not the case with the nickel or gold-plated instrument.
4. The instrument requires no heating apparatus.
5. The avoidance of all sharp, metallic angles and points, which injure the skin of the head and face.
6. The obliteration of the fenestræ prevents the feathering of the blade.

Prof. Braun speaks in unmitigated terms of disapprobation of Tarnier's forceps, Alexander Simpson's instrument, and Felsenreich's modification of the last-named forceps. Felsenreich's forceps, which have been used at the clinic for some months past, present few points of difference from Alexander Simpson's original instrument. For the past six months there has been much discussion in the Vienna Obstetrical Societies as to the value of the last-named three instruments. For this reason, Prof. Braun has allowed his assistants to use them at the clinic. The results, upon the whole, have not been favorable. Mother and child have, in a number of cases, sustained serious injury. Prof. Braun himself never uses these instruments, and pronounces the principle to be radically false, and the instruments themselves a fashionable folly ("Moderner Schwindel").

The patient having been slightly chloroformed, was placed upon her back, with her lower extremities elevated, and the blades of the forceps were adapted to the long diameter of the foetal head, the maternal tissue being guarded by the introduction of four fingers above the pelvic brim. Seated quietly in his chair, the operator applied traction in the axis of the pelvic brim, and after a few, though sometimes powerful efforts, brought the head down into the middle of the pelvic canal, where rotation was effected by readjustment of the blades, and the birth of the child rapidly followed.

Prof. Braun never uses the forceps as a *lever* or *compressor*.

The child proved to be a male, weighing 3900 grm. with a length of 52 centimetres. The child was profoundly asphyxiated, but when the cerebral congestion was relieved by its elevation above the level of the placenta, the breathing became normal, and the facial hyperæmia disappeared. The placenta was at once expelled, the corpus uteri being thrust downwards towards the symphysis in such a manner as to cause complete descent of the collum uteri into the cervical canal. The collum uteri folded upon itself as if telescoped.

When the cord ceased to pulsate, 30 minutes after its delivery, it was severed, but not ligated. This departure from custom was made, in order to show that ligation of the cord, after cessation of pulsation, is not a scientific necessity.

Prof. Braun is not an iconoclast, however, and in the lying-in ward all umbilical ends are ligated in two places. After careful irrigation of the vagina with a 3 per cent solution of carbolic acid, an iodoform tent, weighing 5 grammes, was introduced into the uterus.

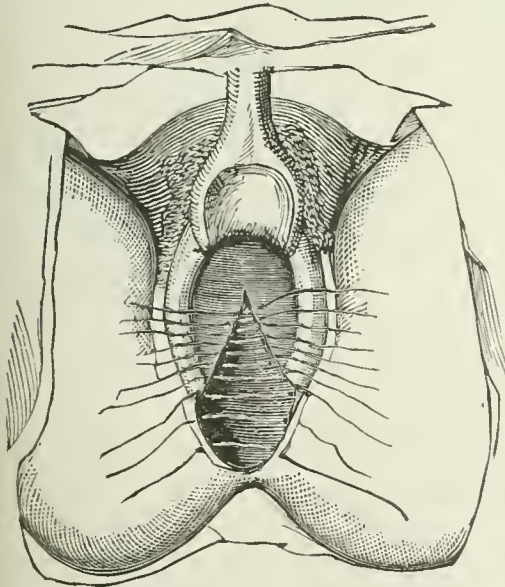
At the time of writing, both mother and child are thriving.—*Medical News*.

Governor Cleveland, of New York, last Monday signed the bill prohibiting the manufacture of cigars in tenement houses in New York city.

PRIMARY OPERATION IN LACERATED PERINEUM.—NEW METHOD.

[Dr. W. L. Barret, Prof. of Diseases of Women in the St. Louis Medical College, describes, in the *Courier of Medicine*, Feb'y, '83, a new method of performing the primary operation for laceration of the perineum. We extract the following which gives in detail his plan of operating.]—ED.

The plan I have pursued is to place the patient in the usual position on the back, with the legs flexed on the abdomen. A satisfactory light is indispensable, and if an artificial light is employed a reflector will be of signal service. The parts are sponged off, and a sponge inserted into the vagina to prevent the uterine hemorrhage from obstructing the view. The vaginal sponge having been introduced, a Sims' speculum is inserted into the anterior commissure of the vulva. This exposes the posterior surface of the vagina to the view of the operator, and he can plainly see the whole extent of the rent. Then, with a very fine, short, straight needle, with a trocar point, armed with very fine silk, and held with a needle forceps, the operator begins at the superior or vaginal extremity of the rent, and stitches the mucous membrane together, from above downwards. The sutures are simple interrupted sutures, cut off short on the vaginal surface and left to ulcerate out. Five or six sutures are used to the inch. The needle is entered and brought out only a line or two from the torn edges, so that the suture embraces very little tissue.



The cut shows the patient, and speculum in position, and indicates the method of introducing the sutures. The highest suture, viz., that at the superior extremity of the rent, is inserted first, and the lowest last. It also conveys an idea of the

amount of tissue embraced by each suture. No matter how serpentine and ragged the rent may be, it is accurately followed with the needle from its commencement on the vaginal surface to the edge of the fourchette. No trimming of serrated or irregular edges should be resorted to; but, on the contrary, every tongue of tissue should be fitted into and stitched down to its proper place so accurately that the mucous surface cannot gap and discharges cannot enter. The point on which the success of the operation turns, and the only point worthy of consideration in the proceeding, is the exact approximation of the edges of the mucous surface. It is not necessary either to effect apposition or to maintain apposition of the lacerated parts that the sutures should be strong or that they should embrace much tissue in their grasp.

The perineum, normally only $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in length, is during labor stretched to four or five inches in length. Immediately after labor the parts are flaccid and elongated; and if the torn surfaces are placed in apposition, in the same relationship that they occupied before the injury, they fit together as naturally and as accurately as an oyster fits into its shell. There will be no tension on the sutures, and no disposition to a separation of the lacerated surfaces; but, on the contrary, the contraction that takes place in the perineal tissues, as involution progresses and the parts resume their ante-partum condition, tends to draw the severed surfaces into closer apposition, and thus contributes to the success of the operation. If the parts have been drawn by deep perineal sutures into artificial relationship, the normal change referred to disturbs the apposition that is forced and unnatural, and opens sinuses, into which irritating discharges percolate and prevent union.

When the mucous membrane has been closed in the manner described, the tear in the perineum will also be closed, and I believe that the passage of sutures through the cutaneous surface might be entirely dispensed with; but it has been my habit to introduce one or two superficial stitches, because it approximates the parts more perfectly and insures a neater appearance. I do not believe the external sutures are absolutely essential. I do not bind the limbs together, draw off the urine, nor constipate the bowels, but treat the patient in all respects as if no operation had been performed. On the fourth or fifth day the external sutures are removed. Those in the vagina are left to ulcerate and come away spontaneously. The operation, performed in this way, is simpler, less painful, more rational, and, I believe, more certain in its results than when the usual method is adopted.

BORACIC ACID IN THE TREATMENT OF OTORRHOEA.—A paper was read at a meeting of the State Medical Society of Pennsylvania, by Dr. Charles S. Turnbull, of Philadelphia, from which we quote the following:

"A most gratifying experience in the use of powdered boracic acid in the treatment of chronic purulent inflammation of the tympanic mucous membrane, the constant symptom of which is otorrhœa, has induced me to consider the antiseptic, or what might be more accurately termed the '*dry method*' of treatment. The marked success that I have met with, induces me to advocate its use in this most frequent form (in this country) of aural disease. Chronic purulent inflammation of the middle ear continues its work of destruction year in and year out, gradually corroding the contents of the middle ear and seriously compromising the functions of its appendages. Upon these delicate parts, covered by an inflamed or ulcerated mucous membrane (which, it must be remembered, acts the part of the periosteum), all sorts of foreign material collect, and these with the added irritation from fermenting discharges (caused by the high temperature of the parts, collections of the bacteria, etc.) increase the fire of inflammation which burns fiercely, and the mucous membrane, in defence of itself, pours out a copious secretion. To remedy these affections, general surgery has done but little, so that in many instances medical men are glad to get rid of 'patients with running ears,' and this added to the prejudices in the minds of the community at large, and in some of the profession too, as to the injurious effect of healing or 'drying up' as it is termed, discharges from the ear, has caused this affection, through ignorance or apathy, to be much neglected.

"Bezold conceived the idea that boracic acid had failed on account of the powder used. He therefore procured *boracic acid in an impalpable powder*, and when he began *packing the meatus tightly* with it, obtained excellent results. Since Bezold's paper, Büchner speaks highly of the powdered acid in the otorrhœas, and Dr. J. O. Green also recommended Bezold's treatment, which he had used extensively in the meantime. From that time to the present, with few exceptions, the treatment recommended by Bezold and Green was given a trial, but although Politzer, of Vienna, recommended it highly, and Cassells, of Glasgow, did the same thing, no one was satisfied that the plan of treatment was particularly efficacious, or to be preferred to many others. The great mistake, as I have discovered, was in the fact of many experimenters not having observed Bezold's instructions, namely, that *boracic acid must be nicely powdered*. The ear is not to be syringed at all; it should be cleansed with absorbent cotton. According to the character of the intra-tympanic secretion am I guided in the introduction of the antiseptic powder, hence especial note must be made of the exact variety of the discharge as regards color, odor, consistency, etc., etc.

"As the cleansing procedure is more or less apt to provoke reflex coughing, it must be gently and

carefully done; *in fact, the successful treatment of any case greatly depends upon the method of cleansing the meatus*. If it be carelessly done more discharge will be provoked, and an artificial eczema, aggravated by the powder used, defeats the objects sought by a thorough cleansing. The powder is to be poured into the speculum, *ad libitum*. A little will drop through, but the bulk of the powder will remain in the speculum and this will require displacing and *packing*. To hold the speculum still and pack down the powder without causing pain from the edges of the speculum is no easy procedure. Force cannot be employed because by the pressure the edges of the speculum will cut; then too, and suddenly, the mass moves, and whatever is used to thrust it down is apt to impinge, with more or less force, upon the delicate parts beneath. I use a thin steel probe with the point (about 1 line) bent at a right angle, and whilst the auricle and speculum are held immovable, the parts being illuminated with the head mirror, (the head of patient unmoved from first position) I hug the inside wall of the speculum, and so can always tell when I am down to its lower orifice. As the powder is filled into the meatus, through the speculum, it is *packed*, layer upon layer, not tightly, but firmly, meanwhile I gradually withdraw the speculum until it reaches the mouth of the meatus. Here I insert a light pledget of cotton, only to be worn for six or eight hours (until bed time), and then to be withdrawn and not again introduced. My directions to my patients are to permit, in fact, endeavor to have all the powder possible remain within the meatus. If any moisture be felt, sop (that is, wipe by pressing) the mass, and soak out the discharge with absorbent cotton or dry thin linen, but do not disturb the powder. From the moment this agent is used all odor, from the most fetid discharges, ceases, and unless the discharge be extraordinarily profuse, never returns. No reaction ensues if filled into meatus as I have directed. Of course, the mechanical deafness caused by the foreign mass in the meatus was sometimes complained of, but this was gladly endured when explained as only of a temporary nature.

"Oftentimes one packing was enough. In other cases, the packed powder was washed out, by the discharge, in a few days, but I persevered, and have always been rewarded for any trouble in filling and repacking. If the discharge ceases and leaves a hardened mass of powder, etc., filling the meatus, it must be removed, but not by force nor by syringing. It must be softened by the instillation of warm *fluid cosmoline* (petroleol), which has the charming recommendation of not becoming rancid by heat, etc. I have been compelled to require my patients, for whom the powdered acid has been prescribed, to bring with them the substance procured, for inspection, since druggists, as a rule, unless according to special agreement, dis-

pense a powder, so called, composed, for the greater part, of crystals of the acid. Messrs. Wyeth & Bro., of Philadelphia, have furnished all of the powdered acid that I have used. When properly powdered, no particles can be felt, and in dipping the finger into such a mass the sensation can hardly be said to be that of touch; the impression is that of powdered soapstone, such as is used by the glove and shoemakers."

MEDICAL HINTS "GRATIS."—The following hints off admirably the treatment physicians sometimes receive from their patients:

When you go for the doctor always pull the bell violently, using both hands if necessary. Do not wait a reasonable time for an answer, but pull again and again in quick succession, interposing by way of punctuation an occasional kick at the door with your heel. Such procedure is calculated to make the doctor receive you in an amiable manner. If after midnight, do not consider that the doctor is in bed, but sleeps standing behind the hall door; so no time need be allowed for throwing on even the slightest clothing. When he comes to the door or window, which is determined by the amount of sonorous vibrations you make, for the doctor, though not a cowardly, is a cautious man, always begin the interview with an oath in which some deity, heathen or otherwise, is invoked, interpolating a couple of spasmodic gasps, and finish with "Hurry up," which may be repeated any number of times; the oftener the better. This tends to increase the doctor's amiability, accelerates his dressing, and helps to compose his mind, so that he may the more calmly deal with the particular emergency.

Should the doctor come to the door in his night-shirt and slippers, repeat the oath and other little embellishments, and tell him to run on as he is, not to mind his clothes, that you will carry them. This little act of kindness will please him immensely and will be most fully appreciated during the winter months, more especially if a blizzard be on, or the thermometer be in the forties. Be careful and not tell him anything of the nature of the case on which you summon him, or he may take something to relieve it. Don't hint at your name or where you live; this might be fatal. If you send for him, expect him to run all the way, especially if it be only a mile or two. Should it rain, do not give him half of your umbrella, or if you affect to do so, mind and let it drip upon him. A slight irrigation down his spine cannot fail to be appreciated.

Never send or bring a carriage for him, doctors are not used to indulgences; but should you by mistake do so, do not fail to occupy two-thirds of the seat, and like quantity of the apron or buffalo. Talk to him on any subject but the one which is the object of his visit, and expect his answers to be cheerful and gay. If the call is particularly urgent,

more especially if at night, say the patient has been ill for a week or two, that they could not put off sending for him any longer least the neighbours might talk. This will excite his sympathy and admiration. Be careful and have several skilful old women about, who will try which can make the most wise suggestions, and will cite similar cases which with care in their hands never failed. This will be highly edifying to the doctor and save him the trouble of thinking, for which he will feel grateful.

If the case be surgical—"a fracture of the leg" for instance—some bystander must not omit to declare that the limb is not fractured because the patient can move his toes, or tell him the bone will not begin to knit until the ninth day, or some equally novel piece of reliable information. If the case be a medical one, state aloud, so that both patient and friends may be inspired with hope and comforted by the intelligence, that the patient will surely die at midnight, for you heard the death clock in the wall at that hour the night before. Tell him the best time to give the medicine is in the wane of the moon; or that you consider the dose prescribed too large, and think it best to give only half the quantity, and a few more equally sage and complimentary suggestions, which add greatly to his store of knowledge and good temper, while it ensures you a high place in his affection and esteem, and at the same time tends to make him an amiable and tender-hearted old man.

When you think the illness a dangerous one, tell him to call often—not to spare anything, particularly himself. This may be spoken with increased confidence when you have not the remotest idea of paying him. If you do think of paying him—a very strange occurrence—when you suppose the danger past, ask him if he will have to come again.

"God and the doctor we alike adore
When trouble takes us—not before;
The danger past both are alike requited—
God is forgotten and the doctor slighted."

On his first visit you will say, "My dear Doctor, I am so glad to see you," or some equally warm greeting, and take care that he is properly shown in and out of the house. When getting better you will simply call him "Doctor;" when still better you will be careful to add his surname, be cold and dignified; the servant need not show him in or out now. Should he call after this, leave word with the servant that you sleep and care not to be disturbed. This behaviour cannot fail to be appreciated by his sensitive nature, and cause him to exclaim, "There is nothing so beautiful as gratitude, and confidence reposed."

"Three faces wears the doctor; when first sought,
An angel's—and a God's, the cure half wrought;
But, when that cure complete he seeks his fee,
Satan vile looks then less terrible than he."

REMEDIES FOR HEADACHE.—The following recipes and suggestions for the treatment of differ-

ent forms of headache are collected from a variety of trustworthy sources :

Two grains citrate of caffeine, in capsule, taken every half-hour, is a very effectual remedy in nervous and sick headache. One or two doses are often sufficient to give complete relief. The only objection to its use is sleeplessness, which sometimes results if it is taken in the evening. It is preferable to guarana as being hardly ever rejected by the stomach.

The following, according to Dr. W. W. Carpenter, is very effectual in most forms of headache : Muriate of ammonia, 3 drachms ; acetate of morphia, 1 grain ; citrate of caffeine, 30 grains ; aromatic spirits of ammonia, 1 drachm ; elixir of guarana, 4 ounces ; rose water, 4 ounces. Mix. Dessert spoonful every ten or twelve minutes.

In nervous headache, Dr. W. A. Hammond states the value of various drugs as follows :—Oxide of zinc is of great value. Ordinary dose, 2 grains, three times a day, after meals ; maximum dose, 5 grains. It is best given in forms of pills. Nux vomica is preferable to strychnia. The dose is 1-4 grain, after meals. If the patient be chlorotic, it is well to combine a grain of reduced iron and half a grain of sulphate of quinine. Bismuth, in the form of subcarbonate, will often take the place of oxide of zinc. Dose, 2 grains after each meal. Bismuth probably aids digestion more than any mineral tonic, and is of use when there is gastric disturbance. The bromides are serviceable when the nervous system has been irritated ; when it is exhausted they do harm. Phosphorus is very useful in most forms of nervous headache. The best results are obtained from dilute phosphoric acid, in doses of 30 drops, largely diluted, three times a day, after eating, or phosphide of zinc, 1-10 grain, in pill, three times a day. Arsenic, as a nerve tonic, stands next in value to zinc. Dose, 5 drops of Fowler's solution three times a day, after meals. Galvanism is sometimes valuable, but by no means a specific. The constant current should always be used, being careful to avoid too great intensity, lest amaurosis is produced.

Dr. T. Lauder Brunton, (*Practitioner*.) says : The administration of a brisk purgative, or small doses of Epsom salts, three times a day, is a most effectual remedy for frontal headache when associated with constipation ; but if the bowels be regular, the morbid process on which it depends seems to be checked, and the headache removed even more effectually, by nitromuriatic acid diluted, 10 drops in a wine-glass of water, or bicarb. soda, 10 grains, in water, before meals. If the headache be immediately above the eye-brows, the acid is best ; but if it be a little higher up, just where the hair begins, the soda appears to be the most effectual. At the same time the headache is removed, the feeling of sleepiness and weariness, which frequently leads the patient to complain

that they rise up more tired than they lie down generally disappears.

A writer to the London *Lancet* remarks : At the Middlesex Hospital female patients who have suffered many years from sick headache, evidently of a hereditary character, have been greatly benefited if not cured, by the administration of 10 minim doses of tincture of Indian hemp, three times daily before the attacks. This is well worthy of trial in those cases of ever-living, never-dying martyrdom-like suffering. In headache due to determination of blood to the head and in fever, the following simple treatment is to be commended : Put a handful of salt into a quart of water, add an ounce of spirits of hartshorn and half an ounce of spirits of camphor. Cork the bottle tightly, to prevent the escape of the spirit. Soak a piece of soft cloth with the mixture and apply it to the head ; wet the rag fresh as soon as it gets heated. Soaking the feet in very warm water, in which a spoonful of mustard has been stirred is also beneficial in drawing the blood from the head. Two teaspoonfuls of powdered charcoal well-stirred in a half a glass of water and drank at once, is a valuable remedy in sick headache from sour stomach, flatulence, etc. Tincture of nux vomica is recommended by Ringer as possessed of real curative powers, when given in drop doses, repeated every 5 or 10 minutes, for 8 or 10 doses, and then continued at longer intervals, for sick headache, accompanied with acute gastric catarrh, whether due to error in diet, constipation, or no apparent cause.—*Hosp. Gazette*.

THE DOCTOR'S DREAM.

I am sitting alone, by the surgery fire, with my pipe alight,
now the day is done :
The village is quiet, the wife's asleep, the child is hush'd,
and the clock strikes One !
And I think to myself, as I read the LANCET, and I bless
my life for the peace upstairs,
That the burden's sore for the best of men, but few can
dream what a Doctor bears ;
For here I sit at the close of a day, whilst others have
counted their profit and gain,
And I have tried as much as a man can do, in my humble
manner, to soften pain :
I've warned them all, in a learned way, of careful diet, and
talked of tone.
And when I have preached of regular meals, I've scarcely
had time to swallow my own.
I was waked last night in my first long sleep, when I crawl-
ed to bed from my rounds dead beat.
" Ah, the Doctor's called ! " and they turned and snored, as
my trap went rattling down the street !

I sowed my oats, pretty wild they were, in the regular
manner when life was free,
For a Medical Student isn't a Saint, any more than your
orthodox Pharisee !
I suppose I did what others have done, since the whirligig
round of folly began.
And the ignorant pleasures I loved a boy—I have prett
well cursed since I came to be man.

But still I recall through the mist of years and through the portals of memory steal.
The kindly voice of a dear old man who talked to us lads of of the men who heal,
Of the splendid mission in life for those who study the science that comes from God,
Who buckles the armor of Nature on, who bare their breast and who kiss the rod.
So the boy disappeared in the faith of the man, and the oats were sowed, but I never forgot
There were few better things in the world to do than to lose all self in the doctor's lot.

So I left life that had seemed so dear, to earn a crust that isn't so cheap.
And I bought a share of a practice here, to win my way, and to lose my sleep;
To be day and night at the beck and call of men who ail, and women who lie;
To know how often the rascals live, and see with sorrow the dear ones die;
To be laughed to scorn as a man who fails, when Nature pays her terrible debt;
To give a mother her first-born's smile, and leave the eyes of the husband wet;
To face and brave the gossip and stuff that travels about through a country town;
To be thrown in the way of hysterical girls, and live all terrible scandals down;
To study at night in the papers here of new disease and of human ills;
To work like a slave for a weary year, and then to be cursed when I sent my bills!

Upon my honor, we're not too hard on those who cannot afford to pay.
For nothing I've cured the widow and child: for nothing I've watched till the night turned day;
I've earned the prayers of the poor, thank God, and I've born the sneers of the pampered beast,
I've heard confessions and kept them safe as a sacred trust like a righteous priest.
To do my duty I never have sworn, as others must do in this world of woe,
But I've driven away to the bed of pain, through days of rain through nights of snow.

As here I sit and I smoke my pipe, when the day is done and the wife's asleep.
I think of that brother-in-arms who's gone, and utter—well, something loud and deep!
And I read the LANCET and I fling it down, and I fancy I hear in the night that scream
Of a woman who's crying for vengeance! Hark! No, the house is still! It's a Doctors' Dream.—[*Punch*, Jan. 20, 1883.]

SYME'S AMPUTATION.—Dr. S. Savory, in the London Lancet, gives the following in reference to this operation:—

Every one knows that Mr. Syme attached very great importance to certain details of the admirable operation of amputation at the ankle-joint that goes by his name. He insisted especially upon the position of the incision across the sole. "The foot being placed at a right angle to the leg, a line drawn from the centre of one malleolus to that of the other, directly across the sole of the foot, will show the proper extent of the posterior flap. The knife should be entered close up to the fibular

malleolus, and carried to a point on the same level of the opposite side, which will be a little below the tibial malleolus." Thus he laid it down, and he dissected the flap off the os calcis from below upward. These directions were for a long while rigidly observed, but of late years surgeons have been less particular in the direction of the incisions. That across the sole is often made obliquely backward at the expense of the flap. The incision across the front of the joint is also varied, sometimes being quite transverse, at others curved toward the toes. With regard to the heel, of course the more obliquely backward the incision of the sole is made the less difficulty will there be in the reflection of the flap, if done from below upward; but it seems to me of importance to preserve at least the whole of the heel, so that it is best to make the incision a vertical one. The thick integument of this region forms so capital a pad on the extremity of the stump that care should be taken to secure the whole of this, and to bring it well forward in the first instance, for during repair and afterward there is a tendency in this to be drawn backward. Of course, it will not be forgotten that after this operation the person stands and walks directly upon the extremity of the stump. With regard to the particular points where the extremities of the vertical incision should be, some surgeons keep them both on a level with the external malleolus, but prefer to have them rather more forward—that is to say, on a line with the extremity of the internal malleolus, but not extending higher than the level of the external one, for the base of the flap is thereby so much broader. This is, I think, an advantage, and, so far as I can see, there is no objection to it. But of all changes in the operation I should attach most importance to the way in which the dissection is done. I greatly prefer, after making both incisions, to open the joint from the front, and then to work from above downward. This mode of dissecting out the os calcis is far easier than the original plan of dissecting from below upward, and there is less danger of inadvertently cutting into the substance of the flap. I have adopted this plan now for several years, in many cases, and I cannot doubt that it is a much better one of performing the operation. By dissecting out the os calcis from above downward, and so escaping the only difficulty in the operation—that of turning off the heel—there is no temptation, as in the other way, by carrying the first incision obliquely backward, to sacrifice some portion of the flap.

QUESTIONS FOR FINAL EXAMINATION. M.R.C.S. ENG.—The following questions were given at the written portion of the "final" examination for the diploma of member held on the 19th and 20th of January last:

Surgery and Surgical Anatomy.—1. The femur

being fractured in its upper third, just below the trochanter minor, enumerate all the muscles which might displace the upper fragments grouping them according to their actions. Give their origin, and insertions. 2. Mention, in the order in which they occur, beginning at the external surface, the parts divided in the operation of opening the colon in the left loin. Name the structures which serve you as guides, and those to be avoided. 3. What are the causes and signs of suppuration within the antrum? Give the appropriate treatment. 4. Give the usual symptoms of intra-cranial suppuration following an injury to the head. After what class of injuries are such symptoms most common? In what situations may the pus be found. What are the indications for surgical treatment? 5. Give the symptoms, course, and treatment of purulent ophthalmia of infants. 6. What untoward events might occur during the employment of the taxis? How are they to be recognized and met? (Candidates must answer at least four, including one of the first two, of the six questions.)

Principles and Practice of Medicine.—1. What are the symptoms of tubercular meningitis, the conditions under which it occurs, and the means of distinguishing it from the diseases which it most resembles? 2. Describe the symptoms, physical signs, and treatment of aneurism of the arch of the aorta. 3. What are the causes and symptoms of jaundice? 4. Enumerate the official preparations which contain mercury; give the dose of each, and briefly state their chief uses. (Candidates must answer three of the four questions, including question No. 4.)

Midwifery and Diseases of Women.—1. Under what conditions does rupture of the uterus take place? What symptoms and signs indicate its occurrence? 2. State the conditions under which forceps-delivery is called for? 3. You are called to a patient three weeks after delivery, who has a painful fixed swelling occupying the left iliac fossa, with febrile symptoms. What is such a case likely to be? What course is it likely to run? How would you treat it? 4. What are the causes of hæmorrhage from the unimpregnated uterus? (Candidates must answer three of the four questions.)

SULPHUROUS ACID AND IRON IN SCARLATINA MALIGNA.—Dr. Keith Norman Macdonald, after denying the prevalent opinion, that no reliance can be placed on any drug in cases of scarlatina, does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy we possess. He continues, "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that, of all reme-

dial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows:—The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapour through the room, until the atmosphere begins to become unpleasant to breathe. In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark shades which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once, the spray, and permanganate solution will then prove of great service. As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use."—*Brit. Med. Journal.*

THE SALICYLATES AND HÆMORRHAGES IN ENTERIC FEVER.—Dr. James Fergusson, of Perth, writes: "At the time when salicylic acid and its compounds are receiving so much attention, may the following facts be regarded as at least worthy of statement? Last year, while resident in the infirmary here, I had an opportunity of testing the efficacy of certain drugs as antipyretics in enteric fever. These agents were used successively, each over a group of cases, and included the salicylate of soda. The latter had not been long in use when an increased frequency of hæmorrhages from the bowel raised the question, Could the salicylate be favouring the production of that complication

of the malady? Whether it were or not, the suspicion aroused dictated the withdrawal of the salt from use in cases of typhoid. Shortly afterwards, I noticed that a foreign observer had reported the salicylate of bismuth, and, I think, also salicylic acid (though of the latter I cannot be certain, as I am not able now to find the report in question), to cause intestinal and nasal hæmorrhages. The subject would not have been revived by me at present, but for the recent experience of my successor in the resident's office of the above-mentioned institution, Dr. H. McLean Wilson, who joins me in placing the facts before the public. Dr. Wilson in having recourse to the soda-salt in typhoid, found the same striking frequency of hæmorrhages to follow closely. His employment of the agent differed from mine, in that he administered small doses of ten to fifteen grains frequently over the twenty-four hours, while I gave half-drachm doses at longer intervals apart. In the other respect, however, our experiences have been so similar, as to warrant the facts being brought under notice, so that the important practical question involved, may, if possible, be decided by the evidence of a number of observers."—*British Medical Journal*.

TREPHINING FOR INTRA CRANIAL ABSCESS.—Dr. Kilgarriff, *Dublin Journal of Medical Science*, January, 1883, exhibited a patient before the Surgical Section of the Academy of Medicine, in Ireland, on whom he had performed the operation of trephining on account of an abscess resulting from a fall in the hunting field. The patient was unconscious for two hours after the accident. At the end of a fortnight he was removed to Dublin, suffering much from pain over the upper part of the occipital bone on the right side, and also much gastric irritability and general debility. Any motion, such as driving, intensified the pain, and caused nausea. On examination a shallow depression, the size of a florin, was found, bound by a well-defined margin, at the situation where he complained of the pain. The diagnosis of fracture, with the subsequent formation of an abscess within the cranium at the seat of the lesion, was made. An exploratory incision was made down to the bone, and a small purulent collection was opened into. Subsequently the operation of trephining was undertaken; and on exploring the bone a small circular opening through the skull, about two lines in diameter, was discovered. Through this opening, situated on the upper part of the occipital bone, some purulent matter oozed. A circular piece of bone was then removed with the trephine to provide free exit of the pus. An abscess cavity, from which almost half an ounce of pus welled up, was opened into. The inner surface of the piece of bone removed was deeply eroded. The cavity of the abscess was washed out with a weak solution of carbolic acid. Subsequently the patient experi-

enced an attack of erysipelas of the head and neck, from which, however, he recovered, and nothing further occurred to interrupt the process of complete recovery of the patient.

PARALDEHYDE: A NEW HYPNOTIC.—The actions of this drug were first studied by Dr. Carvello, of Palermo; and his experiments were made in the laboratory of Experimental Pharmacology at Strasburg, under the direction of Schmiedeberg. Prof. Morselli, of the Royal Asylum of Turin, has, in conjunction with Dr. Bergesis, the assistant medical officer, made an extensive series of observations with it. Its chemical composition is $C_6H_{12}O_3$; and it is a polymeric form of aldehyde. In physiological action it strongly resembles chloral. A dose of three grammes procures quiet and refreshing sleep for from four to seven hours. It differs from chloral in its action on the circulatory system, strengthening the heart's action, while diminishing its frequency. It has also a well-marked action on the kidneys; greatly increasing the flow of urine. The skin is not at all affected. The drug does not give rise to digestive disturbances, to headache, or to any other unpleasant symptom. Up to the present, Professor Morselli has used paraldehyde about three hundred and fifty times. He has found it a valuable remedy in mania, melancholia, and other nervous affections, as well as in the sleeplessness that accompanies acute bronchial catarrh, lobar pneumonia, and heart diseases. He believes that it will to a large extent take the place of chloral.—*British Medical Journal*, February 3, 1883.

PUERPERAL FEVER.—In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowe, on "Puerperal Fever, its treatment and prevention," in which occurs the following judicious expression of views in regard to treatment:

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly-acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contra-indicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless; and yet these remedies have been vaunted and are

actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulpho-carbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience; and I would strongly urge that all depressant remedies are both hurtful and dangerous."

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.—*Am. Med. Digest.*

ABDOMINAL SECTION—208 CASES BETWEEN MARCH 1ST AND DECEMBER 31ST, 1881.—Mr. Lawson Tait, F.R.C.S., Eng., Surgeon to the Birmingham and Midland Hospital for Women, in a paper bearing this title, gives the following analysis of the series:—Exploratory incisions, 13 cases, with no deaths; Incomplete operations, 8 cases, with four deaths. Operations for Cystoma: One Ovary, 36 cases; Both Ovaries, 28; Parovarian Cysts, 12; Hydrosalpinx, 16; Pyosalpinx, 20; or 112 cases, 3 deaths. Removal of Uterine Appendages: for Myoma, 26 cases; for Chronic Ovaritis, 12; for Menstrual Epilepsy, 1; or 39 cases, 5 deaths. Hepatotomy for Hydatids, 2 cases; Hydatids of Peritoneum, 2; Cholecystotomy for Gallstone, 2; Radical of Hernia, 1; Nephrotomy for Hydatids, 1; Nephrectomy, 1; Intestinal Obstruction, 1; Solid Tumors of Ovary, 3; Hysterectomy for Myoma, 10; Cysts of unknown origin, 1; Tumors of Omentum, 1; Pelvic Abscess opened and drained, 7; Chronic Peritonitis, 4; or 35 cases, 4 deaths. Total, 208 cases, with 16 deaths. These operations were not performed under carbolic spray.—*British Medical Journal.*

NOVEL SYSTEM OF BURIAL.—Dr. Alexander Mayer has proposed a novel system of burial, which, while obviating the difficulties and prejudices which at present stand in the way of cremation, he claims to possess all the sanitary advantages connected with that ancient method of disposing of the dead. His system is simply to inclose the body in an opaque glass coffin, hermetically sealed, to drive out the air from this receptacle, and to replace it with carbonic acid, or some other gas of antiseptic properties. By these means the body would be preserved as well as if it had been embalmed, and burial could be deferred, if required, for any period.—*Am. Medical Weekly.*

PANCOAST'S COUGH MIXTURE.—The following

formula, said to have originated with the late Prof. Pancoast, of Philadelphia, has the advantage of containing no opium or morphine, since many persons cannot take either of these remedies without discomfort.

Wild cherry bark,
Senega.....aa 3 iv.
Ipecacuanha..... 3 ij.
Extract of conium.....gr. xv.
Water.....q. s. ft. (by displacement) fl. 3 viij.

Then add

Gin.....3 i.
Compound tinct. of cardamom.....3 i.

Two teaspoonfuls in water constitute the usual dose to relieve cough.—*Med. Bulletin.*

TREATMENT OF GONORRHOEA.—A rather large number of American, German, French, and English physicians have—as we see by reading through the many different foreign and domestic medical journals—of late been reporting very successful results in the treatment of gonorrhœa by the *yellow oleum santali*. We learn that the remedy invariably puts an end to the discharge within two days, but to prevent a relapse it has to be continued for two weeks longer. From 15 to 20 drops given three times daily is the usual dose, which may be administered on sugar or in gelatine capsules.—*Med. and Surg. Reporter.*

THERAPEUTIC VALUE OF HYOSCYNAMIA.—A writer in the London *Lancet* says: "No man who has ever used aconitine for the reduction of temperature will go back to the tincture, Fleming's though it be, or any crude form of the drug; and he who has not used hyoscyamia in troubles of the hollow viscera—stomach, bowels, bladder, etc.—has yet to experience the satisfaction and joy with which he will be greeted after prescribing it for a patient with spasm, retention, dysentery, or hernia; for this last is often spared the surgeon's knife by this beneficent drug."

INCISION OF THE MEMBRANA TYMPANI.—In accumulations of mucus or pus in the cavity, writes St. John Roosa, (*Archives of Otology*) paracentesis *carefully and gently performed* is a great addition to our means of cure. It is not, however, to be lightly undertaken: mucus may be removed with a little delay by the Politzer bag, and a red and swollen drum-head may be relieved by leeches or scarification. In performing paracentesis the author uses a small needle, and makes the incision just large enough to give exit to the pus, blood, or mucus.

A BUSY doctor sent in a certificate of death the other day and accidentally signed his name in the space of "Cause for Death." The registrar says he wishes the profession would be as accurate generally.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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HIGH-PRESSURE EDUCATION.

This subject, though somewhat threadbare, still presses itself now and then upon the attention of those who have at heart the highest interests and future welfare of the coming generation. The prevalent high pressure-system of our colleges and public schools has been the subject of serious consideration by many of the leading members of the profession, both in the old world and the new. So far however, the warnings so emphatically sounded, the admonitions so wisely proclaimed, and the advice so freely given have not been heeded by the community at large, nor acted upon by the educational authorities. This is greatly to be regretted, and while it is to some extent disheartening and discouraging to those who are gratuitously bestowing much thought and labour upon the subject, yet the duty of the hour makes it incumbent upon those who are best qualified to express an opinion, to continue their efforts. The public do not fully understand the gravity of the question, and therefore cannot be expected to appreciate the value of the advice given. It is our great boast, and it is no idle one either, that we have the best school system in the world, yet it must be acknowledged that under its sanction the high-pressure system has had, and is still having, full sway. Nor is this iniquitous system of cramming confined to our own country. In a copy of the *New York Herald* of recent date will be found a letter from a school-girl on this subject which is particularly suggestive. After enumerating her daily routine of studies, which are "arithmetic, algebra, geography, astro-

nomy, grammar, United States history, general history, etymology, spelling, composition, drawing, reading, writing, and singing by note,"—a formidable list truly, for a girl in her teens—she goes on to say:

"After spending a long, wearisome day in a close school-room, trembling every minute for fear I shall forget some date in history or rule in algebra, I walk home, a distance of three short blocks—the only exercise I have except at lunch time, with a short recess in the forenoon in a crowded school-yard. As soon as I arrive at home I sit down to work out my number of algebra problems, which I would not mind if I was not so nervous and tired. After that comes my spelling, twenty review words of former grades, and twenty, historical, geographical, or astronomical names, which take quite a long time to hunt up in their respective text-books. Then next in the order of exercises is a long history lesson, with such lists of names and dates that it makes my head swim to look at them. I study the civil war, together with the explorations and early settlements. By the time I lay down my book to have supper my head feels as if it would burst. I hastily swallow my food, thinking all the time of how much more I must jam in somehow before I can rest. I hurry through two chapters of geography, and while studying them think, 'O dear, I don't half know that history yet!'" and I have got astronomy and an account of Solyman to find in an encyclopædia, history, or elsewhere, besides preparing the definitions of a reading lesson, with the notes about the author. I study and search in histories and text-books until I am about worn out. I do not dislike study, but object to being obliged to work until twelve o'clock every night."

Now we venture to say that the experience of this poor girl is the experience of hundreds of young girls in Canadian schools to-day. Such is not education in the true sense of the word. It cannot lead to the development of a sound mind in a sound body, nor is it to be expected that the mental and physical system at this impressive period of life, can bear up under such a heavy strain. The tendency of the times appears to be to go from one extreme to the other. Surely the pendulum has swung far enough in this direction. Let us have a change, a swinging back again, and to that end the profession has a duty to perform in the premises, which is to continuously and persistently sound the note of warning in the ears of parents and those in authority. This reform, like all other great reforms, is only to be obtained by creating a public sentiment in its favor, and hence the

the great necessity for all who have the best interests of humanity at heart, to persist in the good work until success finally crowns their efforts.

BABY INCUBATORS.

“There were giants in the earth in those days”—and there shall be giants in the earth in these days, to be seen not in side-shows merely, but on every hand—that is, if a report which comes from France be true, and it is well vouched for. And if giant babies are the making of giants and giantesses, all will admit the importance of a good send-off. It is just as essential in raising men and women as it is in raising any kind of stock. “Blood” and scientific management are no less potent in the one case than the other. Indeed, it would be a great blessing to mankind were some of the ideas acted upon by the raisers of good stock, imported into the more important business of raising a superior race of men and women. The working out of the law of the “survival of the fittest” would receive fresh impulse; much sickness, pain and sorrow would be averted, and the sum total of man’s happiness would be immeasurably increased. But no such luck is in store for the human race. The weak and the sickly no less than the strong and healthy will continue to produce after their kind. Man’s two-fold nature is an insuperable barrier to the enactment of civil laws, restricting to any considerable extent the natural law of reproduction. Economic and social considerations will always outweigh considerations having regard to the welfare of the prospective offspring. All that science or government can do in the matter, is to educate the masses into a more perfect knowledge of physical laws.

But to return to the subject—Dr. Tarnier, a French physician, attached to a foundling hospital, reports surprising results from certain recent experiments. This gentleman is said to have been grieved by the large number of children under his care who perished within the first six months of their life. While in this mood a new idea occurred to him. If French chickens, he asked himself, can be raised by artificial means, why not French babies? He caused a box to be made, having glass sides, and resembling an ordinary chicken-incubator. It was furnished with a soft bed, placed in a dark room,

and kept at a temperature of 85° Fah., by means of hot water. In this baby-incubator he placed one of the infants, a miserable specimen of the crying, colicky kind. The child was provided with a nursing-bottle, and of course only fed at regular intervals. The child ceased its crying on the second day, much to the doctor’s surprise, and never again cried for the space of the eight weeks it tenanted the incubator. At the end of this period it had the appearance of a healthy child of a year old. Encouraged by this success, Dr. Tarnier repeated the experiment with like results. He then, with the permission of the hospital authorities, proceeded to construct an incubator capable of receiving 400 children, and in this he placed all the children in the hospital, 360 in number. All except two remained in the incubator six months, when they had to be removed, having outgrown their narrow beds. Were it not that the facts are vouched for by a commission of twelve, who made a report to the Government, the results claimed might be deemed incredible. The average age of the infants when put in the incubator, was eight months and three days, the youngest being twelve hours, and the eldest eleven months. The average weight of the 360 was ten pounds. At the end of six months the average weight was 84 pounds, and all are said to have looked like children eight years old (*i.e.*), as much was accomplished in six months by the incubator as is accomplished in eight years of ordinary life. The infants were not only large but also strong and healthy, and most of them walked within a week of leaving their nests. The results were astonishing, and exceeded Dr. Tarnier’s most sanguine expectations. It is now expected that every child’s hospital will go into the incubation business, so that we shall probably witness a lively competition in the business of raising giants.

If this child-incubator is a good thing in foundling hospitals, and for hospital babies generally, it ought also to be a good thing in all homes blessed with babies. Doubtless we shall soon witness a new industry started under the fostering care of the National Policy, and presently baby-incubator agents will be as numerous as sewing-machine agents. It would be easy to enlarge on the practical value and suggestiveness of Dr. Tarnier’s experiments. First, it is clear the babies were not rocked, yet they enjoyed perpetual repose. This

teaches us that all the fuss and worry of mothers and nurses, so wearing to the constitution, is not only wholly unnecessary but an absolute evil in all its bearings. Instead of being placed in a condition favorable to absolute quiet, our babies are made a sort of family toy to be tossed from one to another as a means of sport. The moment the little creature begins to notice surrounding objects, its powers are excited to the utmost to afford amusement to the family circle. Dr. Tarnier's babies were fed at regular intervals. The home baby is usually fed every time it cries, as though that were a signal of hunger. Most commonly it is a sign of an overloaded stomach.

In conclusion, we may be permitted to say that, the essential conditions to successful baby-raising, are:—1. Absolute quiet, and no unnecessary interference on the part of nurses. 2. Regular and judicious feeding. 3. Uniformity of temperature above that suited to adults. This condition is difficult of attainment in ordinary life, but much may be accomplished by the knowledge that infants require a higher temperature. Even a modified observance of the foregoing conditions would take away much of the worry caused by crying and sleepless babies, and would add greatly to the quiet, health and growth of our children.

PUBLIC HEALTH STATISTICS.

The Dominion Government have very wisely increased the appropriation for the purpose of collecting and utilizing health statistics, the sum of \$20,000, instead of \$10,000 as last year, having been placed in the estimates just brought before the House. It is very desirable that the statistical system recently inaugurated may work satisfactorily, and that it may soon be greatly extended. The success or otherwise of the scheme, will depend largely on the manner in which the returns from the cities are made use of in the central office at Ottawa. In order that the public may become more and more interested through the monthly reports, the returns should be carefully studied, and utilized in a judicious and practical way by one experienced in such work, as is done in connection with similar weekly reports issued and widely circulated in Great Britain, and useful sanitary instruction should be published therewith.

With sanitary statistics the same principle holds good as with other statistics; they are valuable only as a foundation and a guide, and are of no practical value in themselves, only in so far as they are utilized as a guide in sanitary work. It is much to be regretted, that the journal which has been chiefly or almost wholly instrumental in awakening or creating public interest in this country in sanitary work and promoting health legislation, has been allowed to be discontinued. Even foreign medical and other journals, wisely foreseeing the influence for good in the country exercised by the *Sanitary Journal*, have ventured to express a hope that it might be liberally patronized. The *Journal* was not published in the interest of the profession, but was exclusively and exceptionally in the interests of the public and as such, we have always thought it should have received liberal government support. There is no doubt that the most practical way in which the public can be educated in sanitary matters is by means of a regular and well-conducted periodical. We can only express a strong hope, that means may be provided by which such a journal may be published and freely circulated at an early day, as the public health would be greatly promoted thereby, and we are persuaded that in no way could money be more profitably spent.

MEDICAL MEN IN PARLIAMENT.—The following medical gentlemen were elected to the Ontario Legislature at the recent elections:—Drs. McMahon, Dundas; Brereton, E. Durham; McLaughlin, W. Durham; Baxter, Haldimand; Cascaden, W. Elgin; Dowling, S. Renfrew; Widdifield, N. York, and Preston, S. Leeds.

Apropos of this subject the *Can. Med. & Surg. Journal*, for March, 1883, gives a list of medical members of Parliament for the entire Dominion, which may be interesting to our readers.

DOMINION PARLIAMENT.—*Senate*: P. Baillargeon, Quebec; A. H. Paquet, St. Cuthbert; C. E. B. DeBoucherville, Quebec; W. J. Almon, Halifax; T. R. McInnes, New Westminster; J. Schultz, Winnipeg; L. Robitaille, New Carlisle, Q. *Commons*—D. Bergin, Cornwall, O.; J. G. Blanchet, Levis, Q.; H. Cameron, Mabou, N. S.; L. L. Desaulniers, Montreal; J. E. A. De St. Georges, Portneuf, Q.; C. F. Ferguson, Kemptville, O.; J. Ferguson, Welland, O.; J. F. Forbes, Liverpool,

N.S.; J. T. Jenkins, Charlottetown, P. E. I.; J. M. Platt, Picton, O.; P. Fortin, Gaspé, Q.; P. E. Grandbois, Rivière du Loup (*en bas*) Q.; C. A. Lesage, St. Claire, Q.; C. E. Hickey, Morrisburg, O.; G. Landerkin, Hanover, O.; P. A. McIntyre, Souris, P. E. I.; G. T. Orton, Fergus, O.; C. J. Rinfret, St. Croix, Q.; J. E. Robertson, Montague, P. E. I.; L. Springer, Hamilton, O.; T. S. Sproule, Markdale, O.; Sir Chas. Tupper, Ottawa; J. H. Wilson, St. Thomas, O.

QUEBEC.—*Lieutenant-Governor*: L. T. Robitaille. *Council*: C. B. de Boucherville, Quebec; J. J. Ross, Quebec. *Assembly*: L. Duhamel, Wright, Q.; E. Laberge, St. Philomène; A. Cameron, Huntingdon; V. P. Lavalee, St. Felix de Valois; I. Fregrau, Stukely; D. Martel, Chambly; H. J. Martin, Carleton; R. Rinfret, Quebec.

NOVA SCOTIA.—*Council*: D. McNeill Parker, Halifax. *Assembly*: C. H. Munro, West River; A. McLennan, Margaree.

PRINCE EDWARD ISLAND.—*Council*: J. Fraser, St. Peter's Bay. *Assembly*: P. McLaren, New Perth; J. A. F. Gillis, Summerside.

NEW BRUNSWICK.—W. J. Lewis, Hillsboro; E. A. Vail, Sussex; C. A. Black, Baie Verte.

MANITOBA.—D. H. Wilson, Nelsonville.

There are in all sixty members of the profession in the Legislatures—thirty in the Dominion House and thirty in the Local Assemblies. On the other hand in the British Parliament there are but four medical men.

PROFESSIONAL TOUTING.—We are pleased to learn that the "Integrity Medical Aid Fund" of the City of Toronto has closed its career in deference to the remonstrances of the profession. Having thus aided in cleaning the Augean Stables at home, we may now turn our attention to some of the professional touters throughout the country. We have received several notices of flagrant cases of this nature, clipped from newspapers and printed on cards, which we have been asked to advertise *gratis* in the LANCET. One of the practitioners to whose "card" attention has been called, after enumerating all the possible titles to which he can lay claim, recommends himself in the following terms:

"I have been many years in the practice of medicine, and have been favorably placed to acquire a thorough knowledge of the prevalent diseases of this country. By kind, considerate and enlightened treatment of the sick, I hope to merit your patronage."

Another physician touts for patronage by publishing a "list of fees" which he has full confidence will meet with public approval. The latter offers his services for 50 cents a visit in the village and 25 cents a mile to go into the country; midwifery cases within two miles \$4. Still another adopts the old method which has been frequently exposed, of having his name inserted in the papers in connection with every trivial accident which occurs in the vicinity to which he may have been summoned. It is almost unnecessary to state that all such touting for patronage is a transgression of the code of medical ethics, and is alike injurious to the reputation of those who indulge in it, and derogatory to the dignity of the profession. All such actions are exceedingly short-sighted, and unwise. No physician was ever known to build up a reputation, or to acquire an extensive *clientele* by these means. Such tactics are a sign of conscious weakness, and want of self-confidence on the part of those who adopt them.

THE RIGHT TO MAKE AUTOPSIES IN HOSPITALS.—We quote the following from the *Medical News*, Philadelphia, of March 17, in reference to this vexed question:—"Last year a case was decided in England which is of special interest to hospital staffs, as it involved the question of the right of a doctor to make an autopsy. A post-mortem examination had been made on the body of a child dying in hospital, but no previous communication was made to the relatives, nor was their consent asked or obtained. The medical man was charged with improper mutilation of the body. The magistrate, after a week's deliberation, ruled that the Anatomy Act did not apply, and that the surgeon would not be liable to indictment unless it could be shown that the examination had been conducted in such a way as to offer indignity to the body. We are not aware that a legal decision has been given in any similar case in this country. It is, however, such an important point, especially in hospitals, that we should be glad to know that our American courts held the same view as the English." Gratuitous services, often very prolonged and requiring great skill, are but poorly requited when the medical man is allowed at least to learn all he can from such a case. Yet we have known the right to be often denied, and hospital authorities are so afraid of criticism, that they not

seldom join with the relatives in refusing to allow such an examination.

RAILWAY MEDICAL TARIFF.—The following items from the tariff of fees drawn up by the medical referee of the Grand Trunk Railway Company, have been sent to us for an expression of opinion: The fees for a day visit are \$1; night visit, \$2; office consultation 50 cents; dressing of wounds, first time, \$1, in the night, \$2; subsequent dressings, 50 cents. The following rates include subsequent treatment. Amputations, finger, \$5; forearm or arm, \$20; foot, \$20; leg, \$25; thigh, \$50. Setting fractures, forearm, \$10; arm \$15; clavicle, \$8; leg, \$25; thigh, \$30. Reducing dislocations, elbow, \$10; shoulder, \$8; ankle, \$8; knee, \$10; thigh, \$20. It is scarcely necessary for us to say that we consider these charges on the whole, very low, and in some cases, ridiculously low. We are very much surprised, that any surgeon would assume the responsibility of the treatment of serious surgical cases, for such paltry fees. But we are told that some of our confreres are eager to secure and retain the position, with this tariff before them. If such is the case, the blame rests with the profession, and although it looks like robbery for a rich corporation to grind down the poor surgeons, yet it is perfectly natural and business-like for the company to secure the services as cheaply as they can. The surgeons have themselves entirely to blame, if the fees are less than they ought to be.

SUMMER COURSES OF LECTURES.—We desire to call attention to the summer course of lectures which has been inaugurated in Trinity Medical College Toronto, commencing on the 1st of May. This, although the first summer course in this institution, promises to be a success, judging from the number of enquiries which have been received by the secretary, Dr. Sheard. The announcement of McGill College summer course will also be found in this issue. This, which is the 8th summer session of McGill College, will commence on the 12th of April and continue 12 weeks.

THE STYLOGRAPHIC PEN.—Few minor inventions have been so readily appreciated and come so quickly into general use as the stylographic pen. None who have used one will ever be contented with any less convenient apparatus for writing, and

in a short time there will be few who have occasion to write much who have not adopted it. Recent improvements in the manufacture of the "Livermore" Stylographic Pen relating to the fastening of the needle and the ease with which it can be cleaned and repaired, have occasioned much comment. These improved and valuable pens may be obtained by addressing Louis E. Dunlap, Manager, Stylographic Pen Co., 290 Washington St. Boston, Mass. Price, plain, \$2; gold-mounted, \$2.50.

WINTER DIARRHŒA.—This affection appears to be more than usually prevalent this winter. In fact many physicians have met with it this winter for the first time in many years' practice. An unusually large number of cases have occurred in the United States, as is noted in the health bulletins. The Michigan State Board of Health report, states that "there are many cases of winter cholera which comes on suddenly and is severe." Our Provincial Board of Health also reports the prevalence of diarrhœa in District No. IV., in which it is not only one of the six most prevalent diseases, but amounts to 5 per cent. of all the diseases reported.

ELECTRIC BRUSH BATTERY.—For some years past, parties in the United States have been advertising so-called electric brushes, but it remained for the Am. Electric Brush Co., of Cincinnati to manufacture a genuine electric brush, fitted up with a complete electric battery on the back. This little instrument, which we have examined and tested, is possessed of wonderful power. It may be used in a variety of cases where electricity is deemed advisable. The cell is composed of carbon and zinc and is charged with a solution of bisulphate of mercury. The coil is supplied with a spring armature, regulated by a platinum-pointed screw, and an adjuster to regulate the force of the current. The price of the instrument to physicians is \$4.

KINGSTON MEDICAL COLLEGE.—The following gentlemen have passed the final examination in the Royal College of Physicians and Surgeons, Kingston:—J. F. Kidd, gold medallist; W. G. Anglin, silver medallist; J. Cryan, H. Freeland, T. Moore, and W. Young, with honors; C. C. Clancey, L. T. Davis, W. Hall, D. C. Hickey, G. McGhie, T. A. Page, R. Smith, and A. McMurchy.

R. N. Fraser, and J. E. Sterling were recommended as House Surgeons to the Hospital, and J. Herald and E. Forrester as demonstrators.

IRON IN DIPHTHERIA.—Dr. Tipton, of Selma, Ala., writing with regard to the treatment of this disease in the *Virginia Medical Monthly* (Febr'y) says, "long before a line was ever written on the use of the muriated tincture of iron in the treatment of diphtheria, Dr. Parke, an old and honored practitioner of Richmond, Va., was curing his patients with this agent with a steadiness and certainty that led him to regard it as a specific, so far as any remedy can be." His treatment is as follows: If the mildness of the disease permits, he clears the bowels out well with a purgative; he then gives, even to the youngest child, the following mixture *every hour night and day*:

R Tr. Ferri chlor. ʒij.
Pot. chlor. ʒi.
Syr. acaciæ.
Aquæ. aa ʒij.—M.

SIG.—From a teaspoonful to a tablespoonful according to age. Milk is to be given between the doses, not only to serve as nourishment but also to prevent the iron from upsetting the stomach and bowels. He uses no local treatment at all—in fact denounces it as hurtful where a child resists. The success, he claims, is largely due to the *persistent and unremitting* administration of the remedy *night and day*.

OBITUARY.—The numerous friends of Dr. Henry Croft will regret to hear of his death which took place in Texas on the 21st of February, at the age of 64 years. Dr. Croft was professor of Chemistry in University College, Toronto, for upwards of a quarter of a century, and was for many years the chief chemical expert in this Province. He was superannuated about two years ago, and since then has been living with his son near San Diego, Texas. He died of an affection of the heart.

MICHIGAN SANITARY CONVENTION.—A Sanitary Convention under the auspices of the State Board of Health, will be held in Reed City, Mich., on the 26th and 27th of April. Subjects of interest in connection with sanitary science, and methods relating to the prevention of sickness will be presented at the meeting.

DR. GOODELL'S MIXTURE OF THE FOUR CHLORIDES.—The following is known as Dr. Goodell's mixture of the "four chlorides," which he prescribes as an alterative tonic:—

R—Hydrarg. Bichlor. gr. j-ij
Liq. arsen. chlor. ʒj
Acidi. Hydrochlor. dil.
Tr Ferri, chlor., aa. ʒij
Syr. Zingib. ʒij
Aquæ ad. ʒvj—M.

SIG.—Two teaspoonfuls three times daily in water, after meals.

ODOFORM IN ANAL FISSURE.—Fissure and ulcer of the anus generally resist all medical treatment, and require for their removal incision or dilatation. Dr. Boardman Reid, of Atlantic City, has had good success, however, in the treatment of these intractable affections by means of iodoform. He uses the following ointment:—

R—Iodoformi. ʒss
Bals. Peru. ʒij
Cosmolini. ʒj—M.

SIG.—Apply three or four times a day after washing the parts.

Dr. Canniff desires very particularly to thank his medical brethren who so kindly and voluntarily supported him in his application for the position of Medical Health Officer for the City of Toronto. He also begs to ask for the cordial co-operation of the profession in the work which they well know is most important, onerous, and may be difficult. It is his intention to carefully avoid infringing upon the rights of all in relation to cases which may be reported as affected with contagious diseases. Any suggestions or information which may be kindly supplied to him will be thankfully received.

THE LATE DR. KOLLMYER.—The following address of condolence was presented to Mrs. Dr. Kollmyer by the students of Bishop's College:

Bishop's College, Montreal.

Dear Madam,—We, the students of medicine of the Medical College of Bishop's University, hereby beg to tender our most sincere condolence to you in your sad bereavement by the decease of your lamented husband, Alexander Kollmyer, M.D. We feel that the loss is not yours alone, but that the city of Montreal has lost a valuable citizen, the profession of medicine has lost one of

its most efficient and devoted members, and we, the students in the College of which he was a Professor, have lost a kind friend, an enthusiastic teacher, and a valuable counsellor. And we pray that the consolations of heaven may sustain you now, and be your abiding comfort.

March 16th, 1883.

(Signed), J. B. Saunders, C. D. Bell, Chas. La-Fontaine, and thirty others, comprising the students in medicine in Bishop's University.

QUEBEC ANATOMY ACT.—The Quebec Government has recently brought in important amendments to the anatomy act which will, it is hoped, put an end to the disgraceful body-snatching which has obtained of late in this Province. Inspectors are to be appointed whose duty it will be to see that all unclaimed bodies in institutions receiving government aid are handed over to the schools, who shall pay ten dollars for each body. The institutions are to notify the inspectors within twenty-four hours after the death of any friendless persons, and claimants must show relationship within the third degree.

NEW SPLINT FOR COLLES' FRACTURE.—Dr. McNaughton, of Erin, Ont., has shown us a splint devised by himself for the treatment of Colles' fracture of the radius which meets the indication better than any splint we have ever seen. It is applied to the anterior surface of the forearm and hand, extending down as low as the palm, and is moulded to fit perfectly the inequalities of the surface. The Dr. has used it for many years with great success in the treatment of this form of fracture.

EUROPEAN TRAVEL.—Persons contemplating a trip to Europe, or any other part of the Globe, either alone or with excursion parties, will find it to their advantage to investigate the numerous facilities offered by Thos Cook & Son, the renowned Excursion Managers, of 261 Broadway, New York. Full particulars of their arrangements will be mailed free, on application, to any one interested.

DIPHTHERIA is again prevalent in the Maritime Provinces. Mr. Joseph F. Bent, of Springfield, Cumberland, N.S., lost three of his children within a few days from this terrible disease.

ASSOCIATION MEETINGS.—The American Medical Association will meet in Cleveland, Ohio, commencing on the 5th of June. The Association of

Am. Medical Editors will take place at the same time and place. The Ontario Medical Association will hold its third annual meeting in Toronto, on the first Wednesday (6th) of June.

ONTARIO MEDICAL COUNCIL ELECTION.—Dr. C. T. Campbell, of London, Ont., has been elected by the Homœopathic representatives in the Council to fill the vacancy caused by the death of Dr. Morden, in accordance with clause ii. section vii. of the Ontario Medical Act.

ONTARIO MEDICAL COUNCIL EXAMINATIONS.—In our last issue an error inadvertently crept into the announcement of the date of the primary examination. The primary will commence in Kingston on the 13th of April at 4 p.m., and not on the 4th as therein stated.

MEDICAL HEALTH OFFICERS.—Dr. W. Canniff has been appointed Medical Health Officer for the City of Toronto at a salary of \$1500.

Dr. Neilson has been appointed Medical Health Officer for Winnipeg, at a salary of \$1,200.

ERRATUM.—In our notice of Dr. Sanborn's medical charts in the February issue of the LANCET we inadvertently gave his address, Rockford. It should have been Rockport, Mass.

BRITISH DIPLOMAS.—Drs. W. H. MacDonald, of Trinity Medical College, and S. R. Rogers, of Toronto, have received the double degree of L.R. C.P. & S., Edin.

* **PERSONAL.**—Dr. Richard Orton, formerly of Morriston, Ont., who has been abroad for upwards of a year, has returned, and commenced practice in Guelph.

Coroner.—P. N. Balcom, M.D., of Aylesford, has been appointed Coroner for the Co. of Kings, N.S.

APPOINTMENTS.—Dr. W. Nelson, formerly of Montreal, has been appointed Port Surgeon of the Pacific Mail S. S. Co. at Panama.

T. W. Mills, M.D., &c., Montreal, has been appointed Demonstrator of Physiology and Histology in McGill College, Montreal.

REMOVAL.—Dr. H. H. Gardner, has removed from West Lynne, Man., to San Francisco.

The death of Dr. L. Ranney of New York, and also of Dr. Benjamin Howard Rand, Prof. Chemistry Jefferson Medical College of Philadelphia, is announced.

Books and Pamphlets.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY.

A Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by J. Ashhurst, jr., M.D., Prof. of Clinical Surgery University of Pennsylvania; illustrated with chromo-lithographs and wood-cuts, in six vols. Vol. II. New York: W. Wood & Co.; Toronto: Willing & Williamson.

We have already expressed our appreciation of the value of the above-named encyclopædia in our notice of the first volume. The second volume fully bears out the statements then made. It opens with articles upon wounds, burns, abscesses and gangrene, followed by elaborate articles upon the various venereal diseases, and in the latter part of the volume is begun injuries and diseases of the various tissues. We observe an excellent article in this volume on "The effects of cold," by our distinguished confrere Dr. J. A. Grant, of Ottawa, upon which we congratulate him. The work bears evidence of the painstaking care and the thorough and exhaustive research of the various writers on the different subjects assigned them, and reflects no small degree of credit upon American surgery. The illustrations commend themselves both by their artistic excellence, and by their practical value in elucidating the text. The work is well printed, and handsomely bound. It is sold by subscription only.

PERCUSSION OUTLINES.—By E. G. Cutter, M.D., and G. M. Garland, M.D., Assistants in Pathological Anatomy and Clinical Medicine, respectively, in Harvard Medical College. Boston: Houghton, Mifflin & Co. Toronto: Willing & Williamson.

This interesting little work is intended to teach students and beginners in practice, the anatomical position of the viscera in the normal state, and as a guide to the proper methods of detecting abnormal deviations. The authors state that the book is essentially a condensed abstract of the German literature upon this subject, as contributed by Weil, Ferber, Laschka, and Gerhardt, reviewed and confirmed by their own experience in practice

and at the autopsy table. The work is embellished by some most excellent diagrams, giving percussion outlines of different organs.

THE SCIENCE AND PRACTICE OF MEDICINE, by Professor Alonzo R. Palmer, of the University of Michigan, Ann Arbor. G. B. Putnam & Sons, New York, 1882.

This work is one written by a practical man, with the object in view of bringing practical subjects before his readers. While not likely in any way to interfere with the sale of any other modern work on practice of medicine, it will no doubt be highly appreciated by the friends of the author, both amongst the profession and the students who have attended his lectures.

QUIG COMPENDS NO. I.—QUESTIONS ON HUMAN ANATOMY; By Samuel O. L. Potter, M.A., M.D., with sixty-three illustrations. Philadelphia: P. Blakiston, Son & Co. Toronto: Ure & Co.

This little work contains a series of questions and answers, comprising the essential points of the various structures of the body. It is founded on Gray's Anatomy, and contains many useful hints and aids to memory not found in ordinary works.

Births, Marriages and Deaths.

At Picton, on March 4th, the wife of H. A. Evans, M. D., of a daughter.

At St. Thomas, in Nov. last, Dr. Frederick B. Going, aged 72 years.

At Halifax, on the 27th of Feb., A. Moren, M. D., city medical officer, in the 47th year of his age.

At Cape Sable Island, on the 21st Feb., Dr. J. J. Clark, of Barrington, N. S., aged 56 years.

In Montreal, on the 13th ult., Henry Kollmyer, M.D., aged 51 years.

In Pembina, on the 6th ult., W. D. Ross, M.D., formerly of Ottawa.

At Black River, Jamaica, W.I., on Feb. 4, Dr. George E. Gascoigne, formerly of Brockville, Ont., aged 49 years.

*** The charge for Notices of Births, Deaths, and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

THE CANADA LANCET,

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Original Communications.

ON CREMATION.

BY JOSEPH WORKMAN, M.D., TORONTO.

There is too much truth in the old saying that "one half the world know not how the other half live," and as death is the last scene in the drama of life, it is equally probable that quite as small a proportion are cognizant of the doleful surroundings of this event. It is, however, a gratifying reflection, that in this land, free from the inherited trammels of older nations and the exigencies of dense populations, we are permitted to award to the remains of the departed that right of decent sepulture, which the voice of weeping nature so urgently craves for. But it is not so in all countries. Even within the limits of our own mother land, interments have been witnessed, and must still be witnessed (for landlords have little interest in the disposal of the dead, but much in the permanent retention of their own broad acres), which are truly harrowing to the feelings of all who are constrained to witness them. What would our native born Canadians think, or say, on seeing, on the edges of a re-opened grave, four, six, or eight skulls cast out by the diggers, and some of these even yet not denuded of all the soft parts and the hair? Verily, the writer has seen coffins broken into, in which the grave clothes and binding ribbons came forth almost fresh, the worms having kindly removed the edible textures. Many graveyards have, by indefinite interments in the same spot, been raised three, four, or more feet above the original level of the surface.

This disgraceful disregard of the defunct *bodies* of the people has, for ages, prevailed in so-called civilized countries, wherein millions have been wrung from the tillers of the soil, in reward of

those entrusted with the care of their souls. All this is very bad, and we, who dwell in a different land, free from the crushing tyranny of landlordism, and the unholy exactions of a pampered hierarchy, should thank the good Providence which has cast our lot where such evils are, and, it is to be hoped, ever will be, unknown. Yes, it is very bad, but not in our mother land, with all her faults and imperfections, has the disregard of decent disposal of the dead reached that climax of outrage, which is to be observed in other parts of Europe. Many of us who have, perhaps, regarded with abhorrence or disgust, the introduction of the practice of cremation, might feel inclined to change our views, or mitigate our sentence of condemnation, did we know a little more of the causes which have led to the proposal of this system. At the conference of sanitarians held last year in Geneva, this subject was freely discussed, and although our Provincial representative did not feel called on, or even warranted, to take any part in the discussion, seeing that in America there is as yet abundance of available land for the enlargement of cemeteries, or for the establishment of new ones, his Italian confrères have not only not hesitated to rank him in their list of *contents*, but have also requested from him his annual subscription, which, of course, his Canadian habits of thought and conventional sentiment do not permit him to transmit. So much for innocence getting into foreign company.

This gentleman has placed in our hands several printed documents, received by him from his European sanitary colleagues, and we think, in justice to the illustrious authors, as well as to the readers of the LANCET, we may venture on the reproduction of a few extracts, after careful perusal of which a considerable change of sentiment, in the minds of the latter, may be experienced. We select for our purpose, a short pamphlet entitled, "Il camposanto Vecchio a Napoli," that is, the old holy-field at Naples,—the equivalent of our old English title of "God's acre." The writer seems to have been a Florentine, who in 1878 was addressing a friend at home. Having made his way into this old place of sepulture (not in fact graveyard, for such, as we understand the word, it certainly was not), he entered into conversation with the caretaker, when the following information was obtained.

"Pardon me, custodian, what are those large

round stones I see on the pavement, all numbered with the chisel?" "Sepultures, Signore," he replied. "There are in all 365, exactly as many as the days of the year, 360 are here, as you see, and 5 others are in the church. At half-past six in the evening, one is opened each day, and, with that machine down there, the dead that have arrived in the day and those who are brought through the night, are buried. It is closed at half-past six in the morning; but if it would please you to see how we do it, amuse yourself in the meantime, and come again towards seven, that you may be *diverted*."

After parting from the custodian, the visitor wandered around, and among other sights he met with the following. "Two old men, with heads bare, under a scorching sun, ran through the various parts, up and down along the lines of sepultures, reciting psalms in a low voice, and every now and again making lamentation, at one time striking their breasts, and again making the sign of the cross, and next spreading out their arms, and raising their eyes to heaven. Near a stone, at a little distance from me, was a group, consisting of an adult woman, a girl and three children; the woman was certainly the mother; she was praying and weeping at intervals, in broken silence. I would willingly have asked these sorrowers some questions, but I refrained from disturbing the mournful assemblage. The mother was kneeling, with her head resting on the shoulder of her eldest daughter, who was sitting beside her; the eldest of the three children joined in the prayer, and wept; the second was sleeping, with his head between the knees of his sister, and the third was playing with a lizard which was tied by the tail. In one corner two ragged fellows were sleeping and snoring sweetly; in another a lot of rogues were clamoring and jesting, and throwing stones into the air. . . .

Whilst I was silently observing these things, a man without a shirt made his appearance at the gate, with breeches half down his legs; he was carrying something on his head, which at a distance I could not recognize. He entered singing, with one hand on his hip and the other on the object he was bringing on his head. He was as nimble and elegant as a Pompeian figure. He advanced some paces, and after looking around he called out, 'Treonce,' one of the assistants who was sleeping in a corner; he jumped up and ran to meet him, and so did I. The thing which the newly arrived

held on his head, was a little coffin of the dead. Whilst the custodian was preparing the metal casket of deposit, the two assistants undid the lid of the little coffin and exposed the emaciated body of a child of about two years. It was enveloped in a few rags, but a poor garland of green twigs surrounded the slender corpse, and a May rose was seen hanging from its mouth. The thought of the hand which had placed that rose there, came over me, and I felt a choking, whilst the children, sporting down below were running about tickling each other, and smiling and cheery were skipping around. The casket of deposit was prepared in a moment, and the little cadaver was laid hold of by one assistant by a leg, and was tossed into it. The garland flew one way and the rose another. and two streaks of blood ran from the nostrils over the cheeks of the miserable creature. The ragged fellows, between them, made away with the garland and the rose, and the industrious Treonce having, in the meantime, at the sound of some footsteps, finished the breaking up of the coffin, went off with the pieces under his arm, whistling cheerily the air of *Palumbella*.

"In like manner I saw other cases (coffins?) with the bodies of adults arrive, either on vehicles, or carried by hands, or on the roofs of carriages, and to all that I saw nearly the same treatment was given. From one corpse, that of an old woman, I saw, while it was being lifted, the only bit of cloth which covered the abdomen, fall off, and it was left stark naked under the eyes of the staring crowd; in another instance, that of an old man, who slipped from the hands of him who was raising the body by the shoulders, I saw the head slap down on the pavement, with that sinister thump which is never forgotten, and can never be mistaken for any other sound. But it is nothing at all; the satraps of Naples are at dinner; and this little sound will certainly not reach them, nor derange their placid digestion."

The visitor returned on the second evening after, in order to witness the established system of Neapolitan sepulture. Here are some of the sights witnessed by him:—"There are some impressions which cannot be recounted, and we can only think, and be silent, for language is insufficient. The aged priest recited the prayer for the dead; he blessed the bodies, and withdrew, giving a signal to the men of the service, which set them quickly

to work. 'To it,' cried one of them, and in an instant the capping-stone of the huge charnel-house was raised. An escaping volume of sickening stench in a moment drove back the hundred faces of the curious who were standing over it, but another hundred, urged forward by stupid curiosity, fear, and horror, took their places over the fetid opening. The ragged fellows who stood apart, called loudly, opening a passage for themselves through the crowd, which remained closely locked and screaming, feeling themselves suffocated; and in this time the men placed at the machine did not cease to salute one another, calling out, 'Back there! pitch it in! forward, forward, let us finish.' It was necessary to allow a full quarter of an hour to give vent to the beastly curiosity of the crowd, and the dismal operation again proceeded. The wretched machine turned creaking on its wheels, and the metallic ca ket, suspended by its chains, was brought into horizontal position on the ground. At this time I went to the gloomy opening, and running my eyes around, I saw beneath, a formless mass of whitening bones and musty clothes. Horror drove me back. The first body taken off the bier was quickly placed in the metal casket, which, under the force of the winch and crane, was raised a little above the surface, and then let slowly down into the pit. The crowd again bent over it to see the descent, when at a certain point a spring was loosed, the bottom of the casket opened, and the first human carcase went down with a thud, to take its place in the great dungpit assigned to it for its last abode. The casket came up again, and this time it fell to the lot of a young man to present the sad spectacle. Two attendants, the one laying hold of the body by the legs, and the other by the axillæ, placed it in the casket of the machine. The aspect of the corpse, that of a young man, who was now to make the mournful descent, had impressed even the most stupid present. All were breathless, and in the general silence the crane gave out its grating sound. A smothered cry reached my ears, and I saw presenting herself, weeping and approaching the opening, into which the body was descending, a young woman who, a little before, had arrested my attention. Two friends ran after her and seized her by her dress, lest she might throw herself into the gloomy cistern, but she halted and stooped over its edge with glazed eyes, until the body struck the bottom,—she then sank

down, as if it had fallen on her heart, and she gave herself over into the arms of her companions. I turned round to an old man who was near, looking on, and said, 'Do you know her?' '*Robba de lupenare eccellenza*,*' was his reply. 'Enough,' said I. A deep murmur of compassion and fear arose over the scene, and some of us moved out to assist the unhappy one, but we were not in time, for tottering, and throwing her arms convulsively in the air, she disappeared as a phantom, under the light of the lamp which illumined the entrance, borne onward by her companions."

The pamphlet above quoted from, gives the number of the dead thrown into the 360 pits annually, as 7,000, which would give an average of nearly 20 bodies yearly to each. After a year of closure the capping-stone is again raised, and a new supply is cast in. Who will assert that cremation here would not be both a more decent and a more affectionate disposal of the dead?

ON SPASM OF THE GLOTTIS.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.

It is easy to show, from the facts of recent physiology, that the opinions currently taught and received on this subject, are entirely erroneous and misleading. The opinion, in chief, to which exception is here taken, is that the spasm in question is due to an over excitation of the nerves supplying the muscles of the glottis.

The aperture of the glottis is regulated by two opposing sets of muscles, one of which tends to widen, and the other to close it. Both groups of muscles derive their motor nervous supply exclusively from the inferior laryngeal, or recurrent nerve, which is a branch of the pneumogastric. When the latter, or the recurrent branches, are cut on both sides of the neck, the glottis closes, and this closure, as Dr. Burdon Sanderson shews, is due not to paralysis of the dilating muscles, but to the fact that these are overpowered by the superior force of the constricting muscles. "The combined effect" of the activity of all the muscles concerned "manifesting itself in approximation of the vocal cords," and closure of the glottis.—(Handbook for Phys. Labor, Amer Ed. pp. 308-318).

* '*Robba de lupenare*,' means a woman of the town; but what a history may not that of this mourner have been!

This is a very important fact, both theoretically and practically, and is fully corroborated. Guttman, in his "Physical Diagnosis," mentions the same fact in stating that "section of the recurrent nerve in animals produces narrowing of the glottis." (p. 40.) Dr. Austin Flint, discussing the "danger of death from suffocation," in the "obstructed inspiration," occurring in nervous aphonia, says, "the condition is analogous to that after the physiological experiment of dividing both recurrent laryngeal nerves." (Prac. of Med. 5th Ed., p. 309.) The same author has "reported a case in which the left recurrent nerve being situated between a calcareous deposit and an aneurismal tumor, spasm of the glottis occurred so frequently and to such an extent as to prove fatal." (*Id.* p. 371).

Now, in such a case as this, as well as in that of section of the nerve in the physiological experiment, the active condition of the muscles (which, as we have seen, results in closure of the glottis,) must be associated with a paralytic condition of the nerve. This will hardly be questioned, from the very nature of the case; for it is impossible to see how the divided nerve could be the medium for the transmission from the nerve to the muscles of what Dr. Pereira calls "a preternatural stimulus," forcing the muscles into spasm. Besides, Dr. Burdon Sanderson, in his account of the experiment, writes, that "the glottis is partially closed, *just as it is after death.*" (Loc. cit. p. 318). (*Italics mine.*) Further on we read:—"In animals with divided vagi, life is prolonged by tracheotomy," showing that the closure here referred to as "partial," must in reality be so nearly complete, as at all events to produce a fatal result if not obviated by special intervention. How closely drawn is the glossal aperture "in death," will appear from the well-known difficulty of passing a probang within the larynx of the cadaver, on the feasibility of which Dr. Flint throws serious doubts. (Loc. Cit. p. 294.) If it be true, then, that section of the nerve, or the pressure on it of a tumor, results in a condition of the glottis similar to what is present in death, it is a legitimate conclusion that in one case as in the other, nerve action has ceased to be operative as regards the muscle, that in short, the condition is one of nervous paralysis.

This fact is of prime importance to the general practitioner, in the treatment of spasm of the glottis, whether in the case of simple spasm (laryngismus

stridulous) or in the onset of true membranous croup, which is accompanied by recurring spasms of the glottal muscles, often greatly accelerating the fatal issue. It also throws some light on the general failure of what has been known as "antiphlogistic measures," in the latter disease, which Dr. Flint says, "have been employed sufficiently to show that they are not successful, and if they do not do good, they can hardly fail to do harm." (*Id.* p. 299). It must be obvious that in an abnormal condition of the glottal muscles, depending essentially (so far as the spasm is concerned) on paralysis of the motor nerves supplying these muscles, agents which tend still further to lower nervous activity, can hardly be expected to prove beneficial. Here the results of physiological experiment and an enlightened experience are eminently in accord.

The foregoing facts appear to me to prove as clearly as anything in physiology can be proven, that spasm of the muscles of the glottis closing that aperture results from:

(a.) Section of the motor nerves supplying those muscles.

(b.) Pressure on those nerves arresting their functional activity.

(c.) General paralysis on the death of the body.

Suppose now, that a precisely similar spasm of the glottis were shewn to attend the application of a powerful agent—a purely physical force—to the motor nerves of the muscles referred to, would not the legitimate inference be, that the action of such agent was of a paralyzing character also? Would it not be regarded as an outrage on physiological propriety to class as a nervous stimulant or excitant, an agent producing effects indistinguishable from those of nerve section, paralysis and death! Such an agent is electricity; and it is here said to play the *role* of an excitant. "During excitation" of one recurrent nerve, "the vocal cord of the same side approaches the middle line. If both recurrents are excited, the rima is completely closed." (Hand-book, etc., p. 308). Of course it is obvious why electricity came to be called an excitant to nerve action. Appearances seemed to justify it. But appearances are eminently deceptive; and it is expected of a true physiology that it will be able to distinguish the real from the apparent.

It is also authoritatively alleged, that after sec-

tion of the vagi, "the muscular fibres of the œsophagus are paralyzed," (Ib., p. 318), and the same is repeated in all our physiological treatises. This is not the place to enter into a refutation of this fallacy. Suffice it to say, that a muscular tube which, as Dr. Dalton states, is able to eject its contents "by a peculiar kind of regurgitation," is by no means in a state of muscular paralysis; and that its active condition is further vouched for by the observation of Marshall Hall, who found it to display "a distinct peristaltic movement along the tube, after its nerves have been divided, causing it to discharge its contents when cut across." (Dr. W. B. Carpenter, Phys. p. 404.)

Finally, the records of physiology furnish ample evidence, though strangely overlooked, that what has been shewn above to be true of the muscles of the glottis, is equally true of involuntary muscles generally, including the muscular bands of the arterial coats, which invariably contract and empty these vessels into the corresponding veins, on section of their controlling nerves, or on destruction of the cerebro-spinal centres, as in the operation of "pithing."

I am aware that this statement is in flagrant antagonism to the authoritative teaching of the day, and that Dr. Burdon Sanderson enters into the details of experiments to prove that under the conditions just mentioned, "all the arteries are relaxed." (Loc. Cit. pp. 245, 296.) But the very facts he furnishes refute his thesis. For instance, when the heart of the pithed frog is laid open, "only a few drops of blood escape,—the quantity, that is to say, previously contained in the heart and in the beginning of the arterial system," while in the frog whose nervous system is intact, "the bleeding is not only more abundant, but continues for several minutes after section" (p. 296). That is to say, in the pithed frog the arterial system is as empty as its physical structure will permit it to be, and "the whole mass of blood comes to rest out of reach of the influence of the heart" (p. 246), having found a lodgment in the more capacious venous system; while in the frog whose nervous system is intact, the arterial system retains its blood, and yields it up "more abundantly," and continues to do so "for several minutes," till the arteries are emptied. Besides, the operation of pithing is easily performed, and any one can satisfy himself, as I have done, by actual experiment,

in the cases of puppies, kittens, rats and frogs, that the arterial system, so far from being "relaxed" or "dilated," is empty and collapsed, and that it is the venous system which is expanded and engorged.

Indeed, Dr. Burdon Sanderson furnishes absolute proof of this himself, in the case of the splanchnics, though he strangely ignores it. The splanchnics, he tells us, contain the vaso-motor nerves which are distributed to the *arteries* of the abdominal viscera, and which regulate the calibre of these tubes (p. 258). After section of these nerves, these arteries are emptied, and "the portal system is filled." In his own words, "a quantity of blood is, so to speak, transferred into the portal system, and thereby as completely discharged from the systemic circulation as if a great internal hemorrhage had taken place" (p. 260).

These facts are produced here to show that the muscles which control the aperture of the glottis are not alone, or exceptional, in passing into a state of contraction when deprived of nerve influence. There is distinct proof that the same is true also of the muscles of the œsophageal and arterial walls, of the muscular bands of the bronchi and alimentary tube, and indeed of muscles of the involuntary class generally, producing characteristic effects in the organs with which they are associated. As already stated, the fact is of the first importance, not only theoretically but practically, and will some day receive the attention it merits at the hands of the profession.

THERAPEUTICS OF OPIUM ADDICTION.

BY J. B. MATTISON, M.D., BROOKLYN, N.Y.

That the continued use of opium, in any form, from whatever cause, will, in time, beget a well marked functional disorder, is a fact which no properly informed physician can fail to accept; and that this disorder, under ordinary professional regime, is one difficult, and often impossible, to treat with success, is another fact which any one who has had experience in this direction, will, very likely, not dispute. Under special supervision, however, this difficulty disappears, and, granting cases suitable for treatment, the disease proves promptly and easily curable, as the following notes will tend to attest. * * * *

The therapeutics of these cases include bromide of sodium, hot baths, electricity—both galvanic and faradic current, atropia, strychnia, hyoscyamia, quinia, chloral, coca, cannabis indica, Jamaica dogwood, varied tonics, full feeding, and cheerful surroundings. To note these in detail requires some preliminary reference to the morbid condition they are intended to relieve. The symptomatology of opium abandonment, in our opinion, relates to an exalted activity of the spinal cord manifested in varied reflex irritations. To this are attributable the aches, pains, vomiting, purging, collapse and horrible discomfort, in general, which follow entire and abrupt withdrawal of a long accustomed opiate. If this be correct, it is also correct to assert that any drug able to control this over-action must prove potent for good in treatment. Such we have in the bromides. Their power to subdue reflex irritation is known to all, and in no disorder is this more happily proven than in the one to which we refer. A special and *original* application of this power is what we term *preliminary sedation*, which consists in the giving of the bromide for a time *prior* to entire opiate withdrawal—meanwhile gradually reducing the accustomed narcotic—so that at the time of maximum spinal irritation we have maximum bromide sedation, and the one counteracts and controls the other. We use, exclusively, bromide of sodium. It has two leading advantages. Saving bromide of lithium, it contains the largest proportion of bromine, which is the active factor, and it is less unpleasant than any other, never, in our experience, causing gastric trouble. Minor points in its favor are, lessened tendency to digestive and muscular impairment, and cutaneous irritation. We use it in full doses—60 grains, increased to 100 or 120—in eight ounces of water, twice daily, at twelve hour intervals, and continue it from five to ten days, or even longer—average time one week—the extent of its giving, both amount and duration, depending entirely on the peculiarities of each case, before and during treatment.

Hot baths, 110° to 112° , are the most efficient agent at command to relieve and remove the peculiar restlessness which is an *invariable* sequel of opiate abandonment. They are given as often as required, ten to twenty minutes duration. Their efficacy is sometimes enhanced by a short douche or shower. Electricity is used as a tonic and seda-

tive. The galvanic current we often employ from the outset, and, after abandonment, find it useful as a general restorative and remover of local pains. For the muscular debility following withdrawal, nothing, in our experience, equals general faradization—10 to 20 minute seances daily. The sense of exhilarating comfort resulting is often very decided. Occasionally it is used twice daily, and, very exceptionally, it is not at all acceptable.

Atropia is used in initial doses of $\frac{1}{160}$ gr., hypodermically *ter dié*—or its equivalent by the mouth—and pushed until it produces systemic effects—dry throat and disturbed vision. This has never required a dose exceeding $\frac{1}{40}$ of a grain. Strychnia is given in subcutaneous doses of $\frac{1}{30}$ of a gr., thrice daily, and continued, in some form, throughout treatment. Hyoscyamia, in our experience, has proven itself the nearest approach to morphia of any alkaloid yet presented. We use Merck's *amorphous*, in the dose of $\frac{1}{8}$ gr. hypodermically, and have known it, repeatedly, to produce steady sleep of several hours' duration. Quinia is used for a two-fold purpose—tonic and sedative. As the former, in two grain doses, three or four times daily, throughout treatment. As a sedative, in 20 gr. doses, given a few hours in advance of the restlessness following withdrawal, and repeated at 12 or 24 hour intervals, as required. Thermometric observation proves its power to control the rise in temperature noted after opiate abandonment. Subsequently, it is sometimes given as a soporific, and its efficacy in this respect is, to us, beyond dispute.

During the first three or four days after opiate discontinuance, chloral fails of its usual effect and we never employ it. We have not noted the excitement, stated by Levenstein, but, simply, that it does not induce sleep. Subsequently, as a hypnotic, it answers every purpose, and is given—usually combined with a bromide or hyoscyamus—as long as may be required. We use Squibb's make, in decided doses, our experience being that a single full dose is preferable to one small and frequently repeated. When unacceptable to the stomach it is often kindly received, per rectum, same dose as by mouth, in an ounce or half ounce of warm mucilage. Coca, though far from being what some theoretical enthusiasts have claimed, is a stimulant of value, and as such fills a place in treatment. We use Squibb's extract, in half ounce doses, frequently

repeated after the opiate withdrawal. Cannabis indica, in some respects, is an efficient substitute for opium. It relieves pain and brings sleep, though often causing a mild, harmless intoxication. After a trial of various preparations, foreign and domestic, we prefer the fluid extract made by Squibb. It must be given in large doses, the ordinary dose of the books being of no avail whatever. Jamaica dogwood is a somewhat uncertain anodyne and soporific, yet worthy of trial to remove the neuralgic sequelæ of opium addiction. We give it in full oz. doses. Varied tonics include iron, arsenic, digitalis, and cod liver oil. The first two if anemic. Digitalis after the sedative treatment, as a tonic and also diuretic, to eliminate the bromine. Cod liver oil is a particularly valuable roborant, possessed of special nutrient properties to repair the wear and tear of prolonged narcotic addiction. We prefer Moller's plain oil and Phillips' emulsion.

During the first two days of opium abstinence, patients are best restricted to a diet of milk and lime water, in small amounts, often repeated. After that full, feeding is allowed and encouraged to the largest extent consistent with gastric comfort. Cheerful surroundings are a valued adjunct in treatment. No restraint is imposed upon patients, and they are permitted to indulge in walks, rides, drives and amusements freely as possible. The practice of subjecting them to a rigorous search on admission, and regarding them as prisoners under strict surveillance during the period of active treatment, we do not approve. No one of a fine sensitive nature can rest under this constant suspicion without a sense of resentment, which cannot be other than prejudicial to the cordial relation which should ever exist between physician and patient. We ask for and extend confidence, and believe we largely enhance a good result in so doing. Nor do we share in the opinion, largely held, that no reliance is to be placed on the word of opium habitues. While admitting that the greatest liar we ever knew belonged to this class, this admission affords no support whatever to the assertion that they *all* are liars. That the habitual use of opium, in many cases, does exert a baneful influence on the moral nature, we are fully aware, but we also know that in the ranks of these unfortunates are those who would scorn to deceive, and whose statements are as worthy of credence as those upon whom has

not fallen this blight. Under the plan of treatment we pursue, the temptation to secret taking is small. Patients are allowed a sufficient amount of the accustomed opiate during the sedative regime to obviate any great discomfort. Besides, we have at command, *infallible* means for determining clandestine indulgence, both before and after the opiate withdrawal. Two pre-requisites are essential—freedom from organic disease, and an earnest desire of the patient to recover. Granting these, excess of taking—time or quantity—offers no bar to success.

Before closing, we cannot refrain from inviting attention to this method of treatment as compared with that of peremptory abandonment or prolonged decrease, offering, as it does, a more or less happy medium between these two extremes. If our statement as to its merit be true—and we challenge proof to the contrary—then we make bold to assert that no physician is warranted, save under circumstances peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal. We are well aware that it has the sanction of men otherwise eminent in the profession; but, we venture to suggest, with no lack of respect to these gentlemen, that, like a somewhat famous nautical individual, "they mean well; but they don't *know*." Theory is one thing—practice another, and we are quite certain were *they* compelled to undergo the trial, there would be a rapid and radical change of opinion. We regard it as cruel, barbarous—*utterly unworthy a healing art*. Gradual decrease has its advocates, and sometimes its advantages. It is the plan pursued by the charlatans who find in the peculiar, secretive character of this disorder a fertile field. It is a mistake to assert, as does Howe, that "tapering off will not effect a cure." It often succeeds, but oftener fails, unless under close and constant professional observation. Its great disadvantage is, that prolonged decrease tries the patience to such an extent that it is sooner or later abandoned, patient lacking both time and inclination for its continuance.

ERRORS IN HYGIENE.—FEMALE CLOTHING.

BY T. ARNOLD HAULTAIN, M.A., PETERBORO', ONT.

"Scarcely a more complete proof can be found of the tyranny of fashion, or the unconscious 'slavery to which it can reduce the best intellects

"and sincerest characters, than is supplied by the fact of the comparative silence of the medical profession on this subject; silence to which one must think no small blame will attach if ever the world becomes wiser. Members of the medical profession know very well how much nature is outraged, and how she avenges herself." "They might draw attention to the hidden ugliness and scars which good taste will not allow others to hint at. But they know how much more of still greater importance is involved."

This is one of the many vigorous utterances of an admirably practical article in a recent number of the *Nineteenth Century*, by Mr. G. F. Watts, R.A. (1) Nor does Mr. Watts confine himself by any means to artistic deficiencies of costume such as we might expect from a Royal Academician, but truculently inveighs against all articles of dress that violate true hygienic principles.

To his censures on the medical profession, however, we can legitimately and strongly object. Mr. Watts has totally overlooked the fact that there are many institutions in England for promoting the use of hygienic wearing apparel. (2) From casual reading I could name two societies for preserving the natural form of women; besides these, the National Health Society takes this subject into consideration; so does the Ladies' Dress Association; so does the Rational Dress Society, whose tenets were so well advocated not many days ago by Dr. Richardson; and many will remember how wonderfully Mr. Treves' lectures at Kensington interested the highest and most intelligent classes, and how these were followed by an exhibition of clothing under the management of (I believe) the daughter of one of our greatest biologists—Miss Ray Lankester. This last fact shows us how we may more than plausibly trace the source of all these efforts—of which I have mentioned, but a minute quota—to the medical profession. Still Mr. Watts has thrown down a challenge which cannot be disregarded, more especially as it is as undoubted as it is lamentable a fact that the really vicious practices of the fashionable *modiste* are still very rife.

The hackneyed deprecation of high heels, pointed shoes, small gloves, crinoline and tight-lacing we

may safely leave to irresponsible *litterati*; it is to the issues "of still greater importance" that are involved that I wish to call attention, and more particularly to that unequal distribution of temperature in the body which is due to defective or unnatural methods of dressing.

If an analysis of a woman's articles of clothing is made, it will be found that the preponderance of material is massed about the region enclosing the organs of generation,—a plan directly discordant with that of nature. Let us first examine nature's method of protection. Writing towards the close of one of the severest winters Canada has for many years experienced, at a time consequently when the hairy and furry coats of animals would be naturally highly developed, I have at hand a horse, a cow, two dogs, a cat and a squirrel. What do I perceive? In the dogs a remarkable sparsity of hair along the inner aspect of the thighs and up the abdomen in the shape of an isosceles triangle, the apex of which is represented by the xiphoid appendix. In the cat a similar sparse growth of fur, and although the individual hairs are somewhat longer than in other parts of the body, yet there is a scarcity of that shorter under-growth which is the true heat-retainer. In the horse and cow the conditions are precisely the same. The squirrel I cannot equally closely observe; yet judging from the different color of the fur about the perineal, interior femoral, and abdominal regions (resembling the thin growth on its ears), compared with the undoubtedly thick coat on all the lateral and posterior aspects of its trunk and limbs, I cannot but conclude that here too the same conditions obtain. The fact is, the intra-parietal structures are sufficient to preserve for the internal generative apparatus the proper degree of temperature.

Now, turning to modern fashions, what do we find? The waist constricted till the circulation in the cutaneous veins, at all events, is impeded; a prolongation of the stays over the abdomen, far below the umbilicus: an accumulation of garments consisting of the lower parts of those that are slung from the shoulders, and the upper parts of those suspended from the hips; many of these imperious to moisture, (3) and an aggregation of folds most conducive to the retainment of heat.

(1) "On Taste in Dress," by G. F. Watts, R.A., *Nineteenth Century*, January, 1883.

(2) "Women cannot complain in these days that sufficient interest is not manifested in all that concerns their welfare," writes an important daily paper.—(*Standard*, Feb. 8th).

(3) Some corsets (*e.g.*, "Wardropp's semi-belted cuirass corset") actually have a metal plate inserted into the lower portion of the abdominal part.

Let us make, mentally, a transverse section of female apparel in the hypogastric region. 1st. The jersey or under-vest,—perhaps two; 2nd, the chemise; 3rd, the stays; 4th, the drawers; 5th and 6th, the petticoats; 7th, the skirt; 8th, either the lower part of the basque, or the polonaise; 9th, either the apron, or, if she is out of doors, the jacket or dolman; and often, 10th, the carriage robe. This computation is at the lowest figure, for often there is a quilted petticoat, than which no possibly better constructed non-conductor could be imagined; and probably oftener still the corsets are “softly padded,” imparting “more or less fullness to figures wanting the roundness,” etc. To enhance the evil, this heap of matter is not gradually increased or lessened, but extreme frigid and torrid zones succeed each other suddenly and arbitrarily. First, the open neck and shoulders; then the “padded bust”; then the comparatively lightly clothed waist; (*) then these nine or ten thicknesses, followed by a flowing skirt and perhaps open-worked stockings.

An eminent French physician once said that sofas and arm-chairs brought him in thousands of francs a year; many a modern gynæcologist could trace as many dollars to this state of things. What is to be done? The answer to this question lies, in the opinion of many, without the range of the duties of the medical practitioner, and with reason. But what certainly does come within his scope, is to show, on scientific principles, where lie the violations of the rules of health and to combat any arguments that may be raised in their defence. (b) If we can once thoroughly persuade mothers to see the evils with which the prevailing fashions are pregnant, we may trust the remedies to their own good sense and acute inventive genius.

DANGERS OF ERGOT IN LOCOMOTOR ATAXIA.

BY PROFESSOR J. GRASSETT, OF MONTPELIER.

(Translated by W. GRAHAM, M.D., Brussels, Ont.)

For some time Ergot of rye has been frequently prescribed in the treatment of Locomotor Ataxia.

(*) It may not be generally known that the part of the skirt, etc., that goes round the waist is usually made of different and thinner cloth; for example, calico.

(b) I may here remark that the idea that corsets are necessary (to sustain the *mamma*, I presume), is by no means valid; for that purpose the *fascia pectoralis* of the Romans or the *strôphion* of the Greeks would be sufficient.

I do not deny that in some cases it is able to produce good results, and I certainly do not wish to take it from the therapeutics of *tuberculosis dorsalis*, already so uncertain and poorly supplied with remedies. Nevertheless, I believe it is of importance to make known a fact which has come under my observation recently, and which proves that in certain cases of *ataxia ergot* is able to do more harm than good; that in all cases the prescription of this remedy ought always to be surrounded by great precaution, and that the effects ought to be watched, in order to arrest any evil results, should they present themselves. This clinical fact appears to me to be especially interesting at this time, when the observations of Tuczek (to which I shall revert farther on) appear to show that sometimes ergot, instead of curing, may produce sclerosis of the posterior columns.

I give herewith a brief history of a patient that Dr. Privat wished me to examine on the 11th of September last. M. S., of Marseilles, æt. 38, widower without children. His father was rheumatic. He had no history of syphilis, but confessed to venereal excesses. Four years ago he had rheumatic-like pains and headaches, which continued for two years, then suddenly became paralyzed in the third pair on the right side, with diplopia and vertigo. Two or three months afterward; there appeared inco-ordination of locomotion, slight lightning pains in the limbs, but very acute ones in the rectum and perineum. In 1880, his first season at Malon, the disease was well marked (trouble with the sphincters, diminution of sensibility in the lower extremities, inco-ordination), etc. In 1881, the second season, there was great improvement; the action of the sphincters was nearly normal and he could walk pretty well. At the end of winter he felt more fatigued and dull. However, this condition improved and he went to Paris to consult M. Charcot, who had formerly attended him. He prescribed ergot, 25 centig. at first, increasing it afterwards daily by 5 centig., up to a gram. He ordered him to continue 1 gram. a day for three days, then cease and take in its place nitrate of silver. The patient returned to Marseilles and followed the treatment without medical supervision. He took the ergot, and on the second day he was taking the dose of 1 gram. he was attacked with paralysis of the extremities and aphonia. He was not able to move. Sensi-

bility was very dull in the paralyzed members, even in the upper extremities, which had always been absolutely intact hitherto. He did not suffer in any part, but was unable to move; he was not able to raise himself up or remain sitting; he was absolutely powerless. He stopped the ergot immediately, and a gradual diminution of the symptoms took place. At the time we examined him, the arms were nearly recovered; he was able to write, the voice had entirely returned, he could sit up in bed, had some difficulty with his urine, rectum normal, inco-ordination in the movements of lower extremities, especially when the eyes are closed, slight drooping of the upper eyelid, patellar tendon reflex absent, delayed sensation in lower extremities.

The history of this case appears to me to be sufficiently clear to place in evidence the injurious action of ergot of rye. Here is a patient with locomotor ataxia (the diagnosis of which is beyond doubt), which underwent a remarkable improvement. During this period he feels a little fatigued; he takes ergot and when he reaches the dose of a gram. per day, he finds himself paralyzed over the whole body. When the ergot is stopped this paralysis disappears gradually, leaving, however, an increased condition of tabes. It appears to me quite legitimate to attribute these symptoms to the ergot. Without doubt the weariness, which the patient felt, indicated the approach of an increase in his malady; but this attack had been singularly aggravated by ergot. The general paralysis is the result of the drug. This circumstance had applied a whip to the disease and probably left behind it some advance in the posterior spinal sclerosis. The dose prescribed certainly was not very excessive, 25 centig. at first, increased little by little to a gram.; most authors give more. Hammond, who often gives it in ataxia, administers at first a dose of at least a gram. three or four times a day, and continues during several months. Erb (who praises it but little) mentions Waldmann particularly, who gives it in from 1 to 2 grams. per day. The dose then was not considered excessive.

Since the work of Brown-Sequard and of all others who have lauded ergot in spinal lesions, it is said that the indications for the use of this remedy consists in hyperæmia of the cord. It is at the commencement of the attack, to prevent or stop it, that it is necessary to use the vaso-con-

strictor. This drug would appear, therefore, well indicated, notwithstanding it did harm. This at least teaches us two things. In the first place it is necessary that the effects of the continued use of the remedy should be watched by the physician. If M. S. had been thus watched, very probably the remedy would have been withdrawn in time to prevent the paralysis. In the second place it shows that the ergot of rye has, in certain cases of tabes, an injurious action, for which it is necessary to make calculation.

Any special physiological action of ergot upon the posterior columns has not shown itself in any particular way up to the present. Tabes or its symptoms do not figure in the classic picture of ergotism. However, we read in Nothnagel and Rossbach: "In warm-blooded animals the aqueous extract of ergot, in doses comparatively small, and without doubt, also, sclerotic acid, causes anæsthesia and trouble in the co-ordination of movement. In increased doses it produces paralysis, during which the animal, insensible to the most intense pain, does not manifest either voluntary or reflex motion." (Dietz, Lorinser, Handelin and others).

But the recent results published by Tuczek, especially deserve our notice. After an epidemic of ergotism which attacked over 500 individuals in a population of 2,500, 29 patients afflicted with mental derangement entered the Marburg asylum. Siemens has published the report of 11 in the *Archives de Psychiatrie*; and Tuczek reports 18 others, with the autopsy of 4 who died. I will leave those symptoms which pertain to the psychological phenomena and give those only relating to tabes. All the patients presented the symptoms of a lesion in the posterior column of the cord, a lesion which Tuczek directly proved by the autopsies which he made. The patellar tendon reflex was absent in all and did not return, even when the cure seemed complete. The other spinal symptoms were: lightning pains, prickling sensations, analgesia, anæsthesia, inability to stand with closed eyes, ataxia. In some cases the symptoms of tabes dorsalis were complete. The 4 cases examined post mortem were the ages of 9, 16, 20, 33, respectively. The lesion of the posterior column extended the whole length. In two cases it was symmetrical and limited to the columns of Burdach. Tuczek concluded that the ergot had

developed a medullary lesion absolutely similar to tabes. He afterwards tried to produce a posterior spinal lesion amongst animals, by injecting the ergot under various forms. A great number of the experiments failed, but he discovered that the hypodermic injection of sclerotic acid in rabbits, in doses of 3 or 4 grams., produced a genuine ataxia.

This last result, if confirmed, is very important, from the stand-point of experimental pathology. Authors hitherto have regretted that experimentation so far has failed to produce an affection of the nervous system having any analogy whatever to tabes dorsalis. But, now, remembering the experience of Tuczek, it is a fact that ergot develops, in certain cases, posterior spinal lesions, similar to locomotor ataxia. This especially merits our attention, because it explains in a certain measure that in tabetics, accidents are produced by doses of ergot incapable of poisoning a man in good health, consequently it behooves us to be particularly careful in treating progressive locomotor ataxia by the ergot of rye

Correspondence.

RATIONAL TREATMENT OF PNEUMONIA

To the Editor of the Canada Lancet.

SIR,—I am greatly interested in the circulation of your valuable LANCET among the medical fraternity of the Dominion, believing that it is entitled to a place in medical literature second to none on the continent. I have thought of addressing my brethren in the profession through your columns, taking up some points which I believe are worthy of discussion, and I think the members of the profession of the Dominion should aid you in your work by forwarding reports of cases under their daily observation. Some years ago Dr. Jacob Bigelow (the father of the celebrated surgeon of Harvard, H. J. Bigelow) published a small book, entitled, "Rational Medicine," which should be carefully read by every member of the profession, as the truths advanced might serve the purpose of arresting the hand of some irrational practitioner of medicine, and, doubtless, succeed in saving the life of some unfortunate patient.

The fact is, the graduates of thirty or forty years

ago, who left the college halls to enter the, to them *untried paths*, left behind them in regular visitation to the sick, too much of the deadly calomel, and often a blanched and almost bloodless patient to contend with drugs, disease, and the effect of the lancet. We contend in these days, that there is no necessity for much of this, I will not say all of it. A few of the doctors of the present day follow directly in their footsteps; a few still believe in the large bolus, the large blister and the large pill, and try to cure an inflammation by producing not only an inflammation, but a mortification. There is one thing certain, the big-dose men are not the popular men in the profession to-day. There is so much common-sense fact published weekly in the secular and religious press, with reference to hygienic laws and the cause and cure of disease, that the old-school practice does not take with the people. Many excellent physicians are guilty of too much prescribing, using a great variety of drugs, and changing their prescriptions almost daily, thus advancing the interests of the druggist but fearfully depleting the poor man's pocket; while half-filled bottles of medicine are laid aside, altogether useless. 'Tis no wonder that the Homœopath flourishes, rolling around the streets of our provincial towns in "gilded splendor," while the poor big-dose doctor has to drive a little phæton, and, in some instances, gild his pills with a good big coating of untruth to make them palatable.

Rational medicine certainly consists in the recognition of the power of recovery in the system, apart from the use of any drug; and the progressive physician never places his finger on the pulse, without remembering this fact. We find a patient bolstered up in bed, breathing with great difficulty, his face dark and purple, showing imperfect aeration of the blood—an unbalanced circulation—the extremities cold, the head hot, the dyspnoea growing rapidly worse,—a condition, in short, which a good stethoscopist would at once pronounce pneumonia. Now I do not know with certainty how this disease is generally treated by the profession; but I fear from the number that die, the treatment is often *too depleting*. I believe *good treatment* will save the majority of such cases, and what I mean by good treatment, is "rational treatment." For instance, let us draw away the blood corpuscles from the plethoric and consequently over-filled lungs—draw the blood to the extremities. How

can we most easily and certainly do this, if this is the indication?

The following simple plan of treatment will, I believe, save at least ninety per cent. of all cases, except the very aged and infants. Hot mustard and cayenne pepper foot-baths, repeated every two hours. In the interim of these, a jug filled with hot water should be constantly applied to the feet, and large oatmeal-and-onion poultices assiduously applied to the chest. *Injections should be used to move the bowels rather than purges*, and in the shape of medicine, from six to ten drops of veratrum viride administered every hour. This simple form of treatment will afford immediate relief and almost certainly cure the patient, if adopted sufficiently early and persisted in as long as necessary.

So much for pneumonia. Perhaps at some future time another plain "pen talk" may serve to fill a column or so of the LANCET. Hoping that success may attend your efforts in diffusing new ideas in medicine as the world rolls on apace, I subscribe myself,

Very truly yours,

J. H. BARKER.

Upper Keswick, N. B.,

April 12, '83.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for THE CANADA LANCET.)

The Michigan State Board of Health met in Lansing, Mich., on April 11, 1883. All the members present. The minutes of the last two meetings of the Board were read and approved. The Secretary read a quarterly report of work in the office of the Board, bulletins, documents, circulars, blanks, and reports distributed, correspondence, etc. The Secretary also presented a resumé of the work performed by other State Boards of Health, and a review of sanitary legislation in other States.

The Secretary presented an account of sickness caused by eating salted pork. The sickness was attended by burning in the stomach and abdominal tenderness. Some of the meat was fed to four cats. The symptoms in the cats were, dilatation of the pupils, vomiting, great thirst, and tenderness of the muscles. Diarrhœa was not present. Three of the cats died, the fourth one being barely able

to walk after one month. They were attacked twelve hours after eating the meat. A partial microscopical examination of some of the meat by Prof. T. J. Burrill, of Champaign, Ill., disclosed nothing within the meat to have caused the illness, but on the surface of the "lean" there was found a *micrococcus* enormously numerous, as well as some fungous developments of a mould-like kind sparsely present. The *micrococcus* was of a new variety, entirely distinct from that of "hog cholera," which latter was not detected in the specimen. It is not known whether the organism was on the pork when it was used for food, and it has not yet been determined whether it is now alive. Culture experiments have been instituted to determine that point. It is quite devoid of motion and has a less dense or firm appearance than most of its congeners. It takes the ordinary aniline violet stain. Usually two are connected in a figure 8 form, rarely more.

Hon. John Avery, M.D., of Greenville, was elected President of the Board.

The Secretary presented an account of a death of a railway employè by being caught in a "frog," together with a copy of a bill now before the legislature providing for a wedge of hardwood, or other substance of equal utility, in all "frogs" of an angle of less than 45 degrees. He described the method devised by a prominent railroad man, of tamping hard coal cinders in the frog. This method is not dangerous to the travelling public, and the wedge of hardwood, by its liability to be misplaced, might throw a train from the track and cause many deaths.

Invitations to hold sanitary conventions at Muskegon and Iona were accepted, the dates to be hereafter decided upon. The President nominated standing committees on epidemic, endemic, and contagious diseases, sewerage and drainage, foods, drinks, etc.

The Secretary was requested to prepare a memorial to the President of the United States, petitioning that he place the \$100,000 appropriation in the hands of the National Board of Health.

"Have you ever tried the faith cure?" asked a long-haired, fallow-faced stranger, addressing a gentleman who sat behind him in a street-car. "I have," was the answer. "Do you believe in it?" "I do." "May I ask, then, of what you were cured?" "Certainly. I was cured of my faith."

Selected Articles.

ON SCIATICA AND ITS TREATMENT.

CLINIC BY WILLIAM PEPPER, M.D., LL.D.,

Our first patient is suffering from the painful affection sciatica. He is a big, burly fellow, a car-driver by occupation. He has always enjoyed good health, but has been a good deal exposed to the weather, working from 4.39 A.M. until 11 P.M. and getting only about four hours' sleep. This he has kept up for thirteen years. His occupation requires him to go along the river front; but he has never suffered from malarial trouble.

Last Tuesday, four days ago, after no unusual exposure, he began to have pains in the groin, extending towards the knee, and pains down the back of the thigh. The pains were, therefore, along the lines of the anterior crural nerve in front and the sciatic nerve behind. The suffering is marked at nights, beginning about 8 P.M. and subsiding at 6 P.M. He has noticed this every night. Making any movement that disturbs the hip-joint causes severe pain.

The symptoms of sciatica in its acute form are so characteristic that there is no danger of its being overlooked. In chronic sciatica, however, we have to consider carefully whether we have to deal with pure sciatica, or whether we have pain in the course of the sciatic nerve as one of the symptoms of some deep-seated trouble. In the first place, it is important to distinguish between those attacks which are palpably acute and those which are more or less chronic and in which the symptom of sciatica may be only one of several morbid conditions present. In aneurism of the aorta low down the tumor may press upon the nerves of one side, causing pain in the course of the circumflex the genito-crural, the ilio-inguinal, or the sciatic nerve. Under such circumstances there may be sciatica as one of the symptoms of a deep-seated abdominal disorder. The same thing is true in some cases of leucæmia where the abdominal glands are first involved. I have seen on several occasions the first symptoms in lymphatic leucæmia resemble those of lumbago or sciatica, and the real condition has not been recognized until the progressive failure of health and strength, the increasing anæmia, the continuous enlargement of the lymphatic glands, or the examination of the blood, has revealed the nature of the disease. In any case of chronic sciatica it is necessary to consider all sources of pressure on the nerve, and until this has been done it is not safe to say that the neuralgia is due simply to an affection of the sciatic nerve. In an acute attack like the one which this man has, we are spared all anxiety as regards this point. We at once recognize that it is a case of simple sci-

atica, involving the nerve-trunk; but this knowledge is not sufficient to enable us to treat the case intelligently.

The causes of sciatica are numerous. Let me mention a few of them. Malaria nor rarely reveals itself by some local neuralgia. The most common form is perhaps ordinary trifacial neuralgia, but there may be from this cause neuralgia of the brachial plexus, and frequently one of the sciatic nerves is involved. I have seen cases in which there was no chill, scarcely any fever, but severe periodic sciatica, which rapidly yielded to quinia. You are not to suppose, however, that because a neuralgia exhibits a marked periodicity it is malarial in its origin, for frequently neuralgic conditions resulting from the most diverse causes exhibit a marked periodicity,—i.e., tending to recur at the same hour on succeeding days. Although this man has been exposed to the malarial poison along the river edge in the early mornings and evenings, and although his neuralgia exhibits periodical exacerbations, we are not to assume at once that it is of malarial origin.

In this connection I shall call attention to the presence or absence of pain over the point of emergence of the nerve as a means of some value in the differential diagnosis. In all neuralgias painful spots are found over the points of exit of the nerve affected. In sciatica it is where the nerve passes through the sacro-sciatic foramen. In the purely malarial affection it has seemed to me that the local tenderness is less marked than it is when the neuralgia is dependent upon a definite lesion of the nerve-sheath and trunk, so that excessive tenderness over the point of emergence and excessive pain on motion constitute to my mind evidence against the purely malarial origin of a periodic neuralgia. In neuralgia due to malaria the local tenderness in the interval is slight, but during the paroxysm there is undoubtedly a congestion of the nerve-sheath causing local pain and tenderness; but on the disappearance of the congestion these subside, while if the neuralgia is due to some local lesion of the nerve the tenderness is extreme and more or less persistent. In cases where there is doubt as to the cause of the trouble, the use of quinia in full doses is a therapeutic test that should never be neglected.

Again, I have seen several cases of sudden, severe sciatica in workers in lead. We more commonly see abdominal neuralgias from this cause; but lead-poisoning may also cause a neuralgia of peripheral nerve-trunks.

Far more frequently the neuralgia results from some congestion of the nerve-sheath, often associated with a gouty or rheumatic diathesis; and even though there is no gouty or rheumatic tendency, exposure to damp and cold may cause a sudden congestion of the nerve-sheath, with such pressure upon the nerve-trunk as to give rise to the most

intense pain. This condition may affect any peripheral nerve, as the cranial nerves, the branches of the brachial plexus, very frequently the intercostal nerves, and the sciatic nerves. This is the most common cause of acute sciatica. We are to distinguish between rheumatic neuralgia and that due to simple congestion by the history of the case, by the presence or absence of the rheumatic or gouty diathesis in well-marked form, and by the existence or non-existence of symptoms of rheumatism or gout in other parts of the body.

Neuralgia from any of these causes may pass into the chronic form, and thus the most usual causes of chronic neuralgia are malarial, some toxic influence, or a subacute inflammation beginning as an acute attack and running into a subacute or chronic form, with persistent thickening of the nerve-sheath and constant pressure upon the nerve-trunk.

In addition, sciatica may be an expression of the neuralgic constitution. This is associated with a special condition of system, and is found in anæmic individuals of morbidly sensitive natures. It is in such cases that we see neuralgia in its most protean form. These cases are usually recognized with ease.

In the present case the diagnosis is between malarial neuralgia and simple peri-neuritis of the sciatic nerve. The fact that this man has never had malaria, the fact that there is intense tenderness over the point of emergence of the nerve, and the fact that this persists during the intervals between the spells of pain, render it probable that this sciatica is due to simple congestion.

Sciatica gives rise to very severe pain whenever such motions are made as disturb the relation of the sciatic nerve to the opening through which it passes. The patient may walk pretty well as long as he keeps the leg stiff, but the moment he makes the slightest motion which disturbs the relation of the nerve at its point of exit he is seized with a violent paroxysm of pain. The pain is usually referred to a point between the trochanter and the tuber ischii, thence it extends along the course of the nerve. If the lesser sciatic is alone involved, the pain does not go below the knee, but when the main sciatic nerve is affected, the pain may extend into the calf of the leg and into the foot and radiate through the various branches of the nerve. The pain is often associated with a feeling of fullness, weight, and tingling. There may be at the same time a painful condition of other nerves. In this man there seems to be involvement of the anterior crural nerve.

In all cases of neuralgia there is this tendency to periodicity, the pain being more severe at one period than at others, and sometimes entirely disappearing. The spells of pain more frequently occur during the night, but they may occur during the day. If this neuralgia were purely malarial,

it is probable that the paroxysm of pain would come on at the time that a chill usually appears,—that is, in the early part of the day.

The treatment is based upon a careful study of the causal condition. I shall treat this man in the following condition. The pain is so severe that I shall have injected, morning and evening, into the deep tissues of the thigh a solution of morphia and atropia :

Morphiæ sulph., gr. $\frac{1}{6}$;

Atropiæ sulph., gr. $\frac{1}{80}$.

When thrown deeply into the tissues the injection does much more good than when simply placed beneath the skin. The puncture itself is useful. The mere penetration of the tissues with a needle unquestionably does good ; still more benefit is obtained when the puncture is followed by an injection of simple water ; but of course the best result is derived from the injection of a solution containing a suitable anodyne.

It is an old observation that puncturing the tissues over a painful nerve would relieve the pain.

The practice of acupuncture, by plunging solid needles into the tissues, for the relief of neuralgia, dates back thousands of years in the Chinese practice of medicine. In China there is a caste or class of people whose business it is to practice acupuncture. The needles which they use for the treatment of sciatica are very long, made of fine gold, brought to an exquisite point, sometimes worked with a spiral and sometimes perfectly smooth. These are rapidly rotated between the thumb and index-finger and inserted to a great depth. It has been supposed that the relief afforded is due to puncture of the nerve-sheath, allowing the escape of some exudation which causes pressure upon the nerve. I do not think, however, that this is at all probable, for the anatomical knowledge of those who practice this treatment is very slight, and even if they succeeded in reaching the nerve-sheath the needle would probably be introduced too far and injure the nerve itself ; and, again, the opening would be so small and the tissues are so elastic that very little fluid could escape.

Some attribute the good effect of puncture to the influence of the mind over the body, while others think it due to reflex action on the vaso-motor nerves. I do not care to spend time to day in considering the correctness of these explanations ; but the fact that mere puncture does good in neuralgia is undoubted.

Let me here say that, while I confidently recommend hypodermic injections of morphia I earnestly protest against their use in chronic neuralgia. In no disease will you find the opium habit more readily contracted than in chronic neuralgia. The attacks come on so frequently and so violently that the patient soon becomes the victim of this most troublesome habit. In such cases I should far rather resort to some other means of relieving

the pain than injections of morphia. In this instance I have no hesitation in employing morphia, for the necessity for its use will pass away in a few days.

We should by all means use some form of counter-irritation over the affected nerve. I shall first use a blister; but if the case proves obstinate the actual cautery should be resorted to. I shall apply a blister three inches by four inches.

Internally I shall, for two or three days, give him thirty grains of quinia a day. I do not give it with the idea that it is going to cure the neuralgia, but because his history justifies a suspicion of malarial poisoning, and, even if there is no malarial element, the effect of the quinia upon the vessels of the affected part and its influence upon the general nervous system cannot fail to be of benefit. After a few days the dose of quinia will be diminished and arsenious acid be associated with it. When the injections are stopped I shall also give him belladonna and iron. I shall immediately put him on iodide of potassium, five grains four times a day.

This will constitute the treatment, and by the middle of next week the man will probably be able to return to his work.—*Med. Times.*

TREATMENT OF CANCER OF THE UTERUS.

We make the following extracts from a very interesting and readable clinical lecture on "Cancer of the Uterus," by Prof. W. Goodell, author of *Lessons in Gynecology*. The case under discussion was that of a woman aged 37, a multipara, who suffered from menorrhagia, bleeding after coition, and a foul-smelling discharge. As regards physical examination, he says:—"Passing my finger into the vagina, I come upon a sore which is characteristic. It is crater-like. There is a hard, irregular margin surrounding an excavation, which has on its bottom and sides friable granulations. This is typical of carcinoma.

"The examination that I made has caused a little bleeding. That is one reason why you should never use a speculum in these cases. The finger tells the whole story, and the speculum may cause a hæmorrhage difficult to control.

"What about the prognosis? It is very unfavorable. Out of all the cases on which I have operated, and of which I know the after results, only three have I considered cured. Still, I can prolong life, and that is a great thing. In some of the cases on which I have operated, the disease has not returned in the cervix, but in some other part of the body. I have operated on women apparently in the last stages of the disease, so low that you would not give them two weeks' lease of life, and have seen them get out of bed and live

for over two years. My experience is, that the older the woman the more likely is the operation to be followed by success. In younger women there is more blood in the part, there is a luxuriance of growth, and they are not so apt to be benefited by an operation."

In reference to treatment, Goodell says that Freund's operation is rarely permissible, and then only when the womb is freely movable. "The operation which I shall perform to-day will consist in scraping away the cancerous matter as far as possible, and trying to reach healthy structures. The removal of the friable granulations will arrest the bleeding, which may not return. In doing this, I shall use this serrated curette, and this fenestrated forceps. In buying a fenestrated forceps, you should get it with the obstetrical lock, so that you can fasten the blades securely together. I am removing a large quantity of this most offensive material, and my fingers are going to smell very badly. How shall I get rid of it? I shall first wash them well with soap and water, and then with turpentine, which is very useful under these circumstances. Then I shall again use soap and water, with another go with the turpentine. After this I shall probably immerse them in carbolic water. Permanganate of potassium is an excellent disinfectant, but it has the disadvantage of so staining the hands that one is not presentable for several days after its use.

"Now, suppose a woman comes to you and you diagnose cancer of the uterus, are you going to say, 'Madam, I am very sorry to tell you that you have a cancer?' No, don't you do that. I should not tell even if she asked me to tell her the truth; but in the majority of cases they do not want to know, and will say to you, 'Now, doctor, if you find a cancer, don't tell me.' No matter how good a woman is, or how fully prepared for the future she may be, the knowledge that she has a cancer is a terrible blow, and she at once gives up, begins to go down hill rapidly, and soon dies. I never, except in very rare instances, tell the patient that she has a cancer; but I always tell some member of the family, or a friend, exactly what is the matter. Suppose the patient asks straight up and down, 'Is it a cancer?' You do not want to tell a lie, and you do not want to say that it is a cancer. I get out of it in this way: I say, 'This is not that kind of a cancer which you understand. This is not a hard cancer like that which comes in the breast, and which is hopeless. You have a bad ulceration of the womb. It is not hopeless; there are cases which are cured.' In the case which I have mentioned, where the lady took thirty-five grains of morphia a day, the word 'cancer' never passed my lips, nor did it pass hers. None of the members of the family used that word, yet she knew as well as I did that it was a cancer. It was always spoken of as that "bad

ulceration.' About three years ago I learned a lesson on this point. I was asked by a physician to see a near relative of his. His suspicion was that it was a cancer. I said to him, "Suppose that this is the case, shall I tell the lady?" He replied, 'Yes, she ought to know; tell her by all means.' After I had examined and found a carcinoma, I said, 'I am very sorry to say that this is malignant,' and then went on and told in so many words what the trouble was. She never rallied from that. She made up her mind that her days were numbered, and there was no use in doing anything, and in a short time she died. I say, then, never tell a woman that she has a cancer.

"I have now made a funnel-shaped opening, into which I can readily introduce three or four fingers; before, I could barely get one in. I have not gotten into the bladder nor into the peritoneal cavity, but I am afraid if I go farther posteriorly, that I shall open Douglas' pouch. I can trace the cancerous tissue to the internal os, but it does not pass to the cavity of the womb.

"You see that while there has been some hæmorrhage, still it has not been alarming. Sometimes there is unpleasant hæmorrhage. During the operation you are not apt to have much hæmorrhage if you work rapidly, and quickly get down to healthy tissue. If hæmorrhage should occur, do not use Monsel's solution (the sub-sulphate of iron), for it makes plaster-like clots, and so corrugates and contracts the parts that you cannot continue the operation. Under these circumstances, ordinary cider vinegar serves an excellent purpose as a hæmostatic, without the inconveniences of Monsel's solution.

"Having removed as much as possible of this friable material, I purpose to apply fuming nitric acid to the raw surface. Usually, I prefer the application of Paquelin's thermo-cautery; but the instrument is out of order, and I do not think that I can reach all parts as well with the cautery as with a fluid. I apply the acid with a piece of cotton, allow it to remain for a short time, and remove by injecting water. I then again apply the acid. It is not necessary to use alkalis or oil to neutralize the acid. If enough water is injected, it will so dilute the acid that it cannot injure adjacent parts.

"There will be but little pain from the operation, but she will probably feel some soreness from the position in which the limbs have been held. When she is put to bed she will receive a suppository of the extract of opium (gr. j).

"I am sorry to say that these cases are very common. Cancer is, I think, on the increase; but why it is I cannot say. The disease more frequently affects the uterus than any other part of the body, unless it be the breast.

"You see that I have a little wound upon one of my fingers, but I am not afraid of inoculating

myself with the cancerous matter, for I am in good health. If I were run down, it might be somewhat hazardous to get such offensive matter on a wound. It is the same with dissecting wounds, which occur usually toward the end of the session, and with those who are overworked. This is not the case with venereal disease. No matter whether the health is good or bad, one is liable to be inoculated with syphilis. Nothing would tempt me to thrust my finger into a vagina in which I knew there was a chancre. It was only yesterday that I was asked to take charge of a patient who had a chancre, but I absolutely refused to have anything to do with it. Some years ago I got caught. After examining a case, there appeared on my fingers a sore which would not heal. I shewed it to Dr. Agnew, and he pronounced it to be a chancre. For awhile I believe that I was the most unhappy man in Philadelphia. The diagnosis, I think, was incorrect, for the sore disappeared, simply leaving a scar, and was never followed by any constitutional symptoms. A burnt child dreads the fire, and I cannot be hired to put my finger where I know there is a chancre. Winter before last, in one of the ward classes, after I and a number of the gentlemen had examined the uterus in one of our patients, she called attention to a sore in the vagina, which proved to be a chancre. Some of the gentlemen looked rather frightened, and I cannot say I liked it very well myself.

"A number of years ago, I attended a respectable woman in confinement. I then lost sight of her for several years, when she again wished me to attend her. When I called to see her, I noticed that she kept herself wrapped up. As on the previous occasion it had been necessary to use the forceps on account of the narrowness of the pelvis, I was prepared when the head would not come down, to apply the forceps. When I exposed her, I found the nates and buttocks one mass of venereal disease, and her neck was raw from the same trouble. I would have presented any gentleman with a hundred dollars to have applied the forceps and delivered the child. I stripped my arms to the elbows, and thoroughly applied a mixture of carbolic acid and vaseline. I then applied the forceps, using one hand only in the vagina. As soon as they were in position, I ran out of the room, and carefully washed my hands, and again applied the carbolised vaseline. I then delivered her, and again washed myself with the utmost care. For a number of days I waited anxiously to see what the result would be, but no bad effects followed."—*Glasgow Med. Jour.*

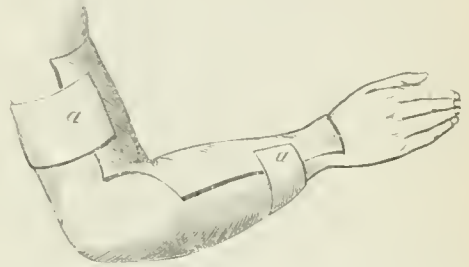
Frequent micturition, where no special cause appears, is best treated by passing a weak galvanic current from the lumbar region to the region of the bladder.—*British Med. Journal.*

PLASTER-OF-PARIS DRESSING IN INJURY TO THE ELBOW-JOINT.

Clinic by Prof. JAMES L. LITTLE, M.D., New York Post-Graduate Medical School.

GENTLEMEN,—The patient that I now show you is a boy of about ten years of age, brought here by Dr. Griswold, of this city. He sustained an injury to his elbow, which has resulted in an inflammation of the joint of a subacute character. Dr. Griswold tells me that when he saw the case, some four weeks ago, he detected marked fluctuation upon the outer side of the joint. With the aspirator he removed about two ounces of pus. Probably you remember that I presented this case to you a week ago. I then detected fluctuation over the seat of the former abscess, and naturally concluded that it was refilling. At that time, as you will remember, I applied a plaster-of-Paris splint to the arm and forearm without altering its position, the idea being to keep the joint at rest. I told you that I would come to-day prepared to anæsthetize the patient and bring his arm into a flexed position, a little less than a right angle, so that if ankylosis resulted the limb would be in a good position for use. It was also my intention, as I told you at that time, to open the abscess, make a thorough examination, under strict antiseptic precautions, and ascertain whether the abscess was connected with the joint, introducing a drainage-tube, if necessary, and dressing the part according to Lister. But you see that the general condition of the patient is very much improved. Upon examination I find that the swelling around the elbow has entirely disappeared, so that no fluctuation can now be detected. No operative interference, therefore, will be necessary, so far as the abscess is concerned. I wish, however, to put the arm in such a position that, should the joint become stiffened, the limb will be of some service to the patient. To this end the boy has been thoroughly anæsthetized, and I now forcibly flex the arm to a little less than a right angle, so that the hand touches the mouth. While the limb is held in this position I apply a plaster-of-Paris splint to the anterior portion of the arm and forearm. This, as you will see, is made of two thicknesses of bleached cotton flannel, wide enough to enclose about one-half of the circumference of the limb. The flannel is thoroughly saturated in a mixture of plaster-of-Paris and water. A strip of the same material, about an inch and a half in width, saturated in the plaster-of-Paris, is applied around the arm, just below the upper extremity of the splint, and another similar band above the wrist, to retain the anterior splint in position. While the plaster is still wet, and with the arm held in the desired position by my assistant, Dr. Powell, I apply an ordinary roller bandage tightly from the hand to the shoulder, moulding the flannel to the limb.

Having accomplished this, the limb is held in the position in which we have placed it until the plaster is set. This takes but a short time. The plaster is now hard, and I remove the bandage, and, as you see, I have a beautiful plaster-of-Paris anterior splint, which is unyielding, and will hold the arm in its present position. At the same time the dorsal surface of the joint, from the external to the internal condyle, is uncovered, so that its condition can be observed from time to time. A dry cotton roller is now applied from the hand to the shoulder, and the dressing is complete, and its appearance is shown in the following figure.



With plaster applied in this way you can make an angular splint to cover any part of the forearm or arm. This dressing has one advantage over all others, inasmuch as after its application the limb can at once be placed in the desired position and held there until the dressing becomes hard. Another advantage is that it can be applied directly to the skin without any irritation resulting. If hairs exist upon the limb, the surface should be smeared with oil or vaseline before applying the splint.

The length of time that I shall allow this dressing to remain upon the patient will depend upon the progress of the case. If the inflammation subsides rapidly, and the pain disappears, it can be removed in a short time and passive motion begun.

—*Med. News.*

DIABETES AND DIABETIC COMA.—Dr. Stephen Mackenzie, Physician to, and Lecturer on Medicine at the London Hospital, in a paper bearing this title, and originally read before the British Medical Association at Worcester, in 1882, gives a total of thirty-seven fatal cases of diabetes in the London Hospital from the beginning of 1874, to Midsummer, 1882. "From this series of cases, twenty-one of which have been under Dr. Mackenzie's own care, it appears that coma and phthisis are the two most common modes of termination of diabetes. Coma is a much more common ending of diabetes than is often supposed by those who see but few cases of the disease. In this series coma of a peculiar kind was the termination

of diabetes in nineteen out of thirty-seven cases, or in just over half the number. Of these nineteen cases of coma, in seven *post mortem* examination showed no gross visceral disease to which the coma could be attributed; in four cases without *post mortem* examinations, there was no *ante mortem* evidence of visceral disease in three, and in one there were well marked signs of pneumonic phthisis during life. Further, there were eight deaths from coma, with old or recent pulmonary disease found at the necropsy; in some of these the affection of the lung was insignificant, in others advanced. The coma that closed the scene in cases of diabetes, implicated (or followed) by pulmonary disease, had certain special characters, to be presently described, showing its connection with diabetes rather than with phthisis. It is not the mere loss of consciousness that terminates so many exhausting diseases. Suddenly developing coma is an unusual ending of ordinary phthisis. Besides these nineteen cases, in three others death was by coma, but an obvious explanation was presented on *post mortem* examination—viz., cerebral hæmorrhage, meningitis, suppurative nephritis. *Onset.*—Pain in the epigastrium or hypochondria, often very severe, sometimes ushers in the attack, and may precede for several days the coma. Delirium, usually of a light garrulous kind, is observed in some cases. Rapidity of pulse is occasionally the first indication of impending coma. Vomiting and diarrhœa, separately or together, were noticed in some cases for a day or two before the attack. Severe headache precedes the coma in others. Fatigue, as pointed out by Prout, and noticed by nearly all who have written on the subject, often determines coma, and the latter is thus frequently induced by a journey. *Special Features of the Coma.*—One of the most striking symptoms in most, though its degree varies in different cases, is a peculiar laborious breathing—an “air-hunger,” extraordinary efforts of filling the chest being made. The patient lies gasping for breath, like a person after violent exercise, whilst no condition in the respiratory organs accounts for its occurrence. Sometimes, this dyspnœa precedes the coma, sometimes the dyspnœa and coma appear together. The coma in most cases commences gradually. The patient can at first be roused, but steadily progresses until it is profound. It occasionally commences more abruptly, and in a few cases passes off, usually to return. The surface of the body is generally cold, and the skin and mucous membranes livid; the pulse is rapid and small, and ultimately becomes uncountable. The external and internal temperature sinks exceedingly low, and Dr. Mackenzie has known the temperature in the rectum to be little over 90° Fahr. This combination of coldness, lividity, and rapid pulse has led me for some time to call the condition “coma-collapse.” Incontinence of urine is

noticed in some patients. The breath has been noticed by some good observers to have a peculiar odor, like sour beer, vinegar, acetic ether, acetone, etc.; but in no case that Dr. Mackenzie had observed has this been detected, though he has been on the outlook for it since 1874, and has directed the attention of those watching the patient to the point. Dr. Frederick Taylor's experience is similar. It has been said that a high temperature is necessary for its occurrence, owing to the low volatility of acetone. The urine is also said sometimes to give off a similar odour, but the author has not noticed it even when evaporated. In some cases, the addition of a solution of perchloride of iron to the urine produces a deep brown colour. This, which is a test for acetone, Dr. Mackenzie has noticed in some cases.—*British Medical Journal.*

BASILYSIS IN DYSTOCIA.—In the March number of the *Edinburgh Medical Journal* Professor Simpson presents a communication on basilysis as a substitute for other methods of diminishing the head in appropriate cases of dystocia. Previous articles by the same author have recommended the method, and the present one contains the account of its successful employment in a case of hypertrophic elongation of the cervix. The woman had some pelvic deformity, and at the time she was seen, about ten hours after the labor began, the os projected two inches from the vulva; it admitted two fingers, and at a full finger's length from the os the vertex was felt presenting, with membranes intact. There was evidence that the fœtus was dead, and while the lips of the os remained half an inch thick, the lower part of the body and the upper part of the cervix were becoming dangerously thinned.

The occiput being to the right and a little posterior, the basilyst was used to perforate the left parietal and upper edge of the left temporal bones, and the point of the instrument was then guided to the anterior part of the base, in front of the sella turcica, and screwed in to the shoulder. When the blades had been separated it was felt that the structures were broken up. To effect more comminution the instrument was again applied just behind the sella turcica, and on its withdrawal the base of the skull felt relaxed. No blood escaped during this proceeding, showing that the child was dead, and the maternal structures were not injured. Some brain matter escaped during the operation, and the rest was evacuated by douching. Traction on the head was made by the fingers, support and counter-pressure being applied to the lips of the cervix during its extraction. The head was delivered easily, but difficulty was experienced with the shoulders, the circle of the os fissuring in different directions, especially at the left side, where the parts were somewhat thin. The distension by the shoulders also wounded the left

nympha and adjacent portion of the vestibule anteriorly and the right posteriorly. The cervix was well douched with carbolized water, and digital pressure applied to the wound of the left nympha in order to stop the bleeding. The placenta was expelled in about twenty minutes, and shortly after some (post-partum) hæmorrhage occurred. This, though not in itself excessive, brought the patient into a very critical condition, from which appropriate treatment ultimately rescued her, and she made a good recovery.

The basilyst, as now constructed by Professor Simpson, is an exceedingly simple instrument, consisting essentially of two blades of equal thickness, which are introduced in close apposition. They thus form a cylindrical shaft, at the pointed extremity of which is cut a screw-thread.

The encephalon may be thoroughly churned up and the opening enlarged by separating the blades after the cranium has been perforated. The skull is then washed out, and the screw-tip directed so as to pierce the ethmoid and sphenoid, or (as in this case) also the base of the skull further back, so that the whole base may be broken up. After the operation, the thumb passing round the forehead at the level of the orbital processes, and the fingers passing about the occiput, the tips of the thumb and middle finger met, showing that the head would then pass through a canal with a diameter of only two inches. In this case the diseased and friable tissues of the mother contradicted the use of forceps. The author claims for his instrument that it does not cost more than the perforator in common use amongst us: and that it has the immense advantage that, whilst it as easily perforates the vault of the cranium, it can further break up the unyielding base, and thus in many cases render us independent of any further head-crushing implement or apparatus.—*Boston Med. Journal*.

INHERITANCE OF CANCER.—In the course of a paper on the Local Origin of Malignant Growths, read in the Section of Pathology at the last annual meeting of the British Medical Association, Mr. Jonathan Hutchinson observed: "It is needful to say a few words as to the Inheritance of cancer in its bearings upon the doctrine of its local origin, since an adverse argument has been founded upon it. It has been urged with much plausibility, that a disease which is capable of inheritance must be a constitutional one. No doubt, to some extent, this is true; but the argument must not be pushed beyond its legitimate scope. The laws of inheritance, as with property, so with disease, concern convection, and not origin or production. The inheritance of a fortune is a very different thing from its acquisition, and gives us no clue as to how that may have been accomplished. The causes of cancer, as we meet with it in practice,

may, perhaps, be usefully classed as three, senility of tissue, local irritation, and inheritance. Of these, only the first two can rank as true causes; the latter, although practically of great importance, is only a mode of perpetuation of that which the other two have originated. Senility gives proclivity, local irritation excites, and subsequently hereditary transmission may perpetuate. The facts, as regards chimney-sweeps' cancer, give perhaps the best illustration of what I mean. Before this malady was practically suppressed by Act of Parliament, I believe it was commonly noted that when the trade of sweep went, as it often did, in a family, proneness to suffer from soot-warts, and for soot-warts to degenerate into cancer, increased in successive generations. Grandsons and great-grandsons were attacked at earlier ages, and with much greater frequency, than those who were new to the trade. Here, then, we observe the liability to a form of cancer, produced in the first instance by a local cause, perpetuated and intensified by hereditary transmission. We witness the genesis of cancer, and see the shares taken by local irritation and inheritance, and how entirely secondary the latter is as regards the former. If we ask what it is which is inherited in the case of the transmission of cancer, probably the nearest approach to an answer which can be given will be to say that it is a peculiarity in cell-structure generally; not germs, not a blood-malady, but a special type of cell organization, permitting, with greater ease than in other persons, the injurious influence of local causes. Even in the sweep, whose forefathers have suffered from soot cancer, the transmitted tendency still waits for the exciting cause; and the disease occurs, not in internal and, therefore, protected parts, but on the same part as it did in his great-grandfather, and under the direct influence of exactly the same cause. Not that I would for one moment doubt that, in some instances, the inherited proclivity may be so strong, that it does not wait for the help of any exciting causes, but manifests its power in the production of a cancer which may be considered spontaneous. It is probably in this way that we ought to explain almost all cases of cancer occurring in very early life; and it may be the fact that, in a few of these, something more definite than mere tissue proclivity may be transmitted, possibly even germinal matter, especially in those cases in which the parent was the subject of the malady. Thus, then, although I fully admit that in the examination of our patients we must make large allowance for the influence of inheritance. I wholly deny that we can allow it rank as a true cause of cancer."—*Brit. Med. Four.*

THE ACTION OF CHLORAL, OPIUM, AND BROMIDE OF POTASSIUM.—Dr. Sidney Ringer. Prof. of Medicine in University College, London. and Dr.

Harrington Sainsbury make the following important observations on certain well-known drugs, after discussing the physiological effects of the agents mentioned in the title of their paper:—"Clinically, the dangers of bromide of potassium and of chloral have been recognized; and thus in our text-books, we find the statements that the presence of grave adynamic symptoms contra-indicate chloral and bromide of potassium. Opium, on the other hand, in such adynamic states, frequently appears to lend actual support. The results of definite experiment we find to accord with the results of clinical experience; and the value of the former lies in that they confirm, and by their definiteness must tend to enforce, the teachings of the latter. The choice of a drug is, however, no simple matter; an advantage here may be outbalanced by a disadvantage there; and practical men may object that they would gladly give opium, but that the disordered stomach, blunted appetite, inactive liver, and torpid intestines, more than outweigh the advantages of opium administration. This clearly is a matter for consideration in the individual case under treatment; and the decision will have to be according as one or other element, asthenia, or derangement of the digestive, etc., powers, is most to be feared. These objections to opium, on the one hand, and chloral and bromide of potassium, on the other hand, raise the question as to whether, in very many cases, a drug, at present rather extensively used, especially in America, viz., bromide of sodium, might not with advantage be substituted in their place. The salts of sodium generally contrast very markedly with those of potassium; for the chlorides, bromides, and iodides of these two metals, the lowest figure would represent the potassium as ten times as active as the sodium. These precise numbers refer to action on the ventricle of the frog's heart (See *Medico-Chirurgical Transactions*, vol. lxx, concerning the action of the salts of potash, soda, and ammonia on the frog's heart), but on all hands the evidence is forthcoming that, whilst salts of potassium are very poisonous, those of sodium are very slightly so. One of the marked points of contrast between the two sets of salts is to be found in respect of inhibition: potassium salts inhibit the frog's ventricle strongly, sodium salts scarcely at all. Here, however, we are considering drugs as to their cardiac effect; and, in respect of this, sodium bromide would rank far ahead of bromide of potassium, chloral, or opium, as to innocuousness. The objections holding for opium would not apply here, for sodium salts are generally very little disturbing to the tissues. With these advantages the general verdict of clinical experience is to the efficacy of bromide of sodium as a hypnotic, and, indeed, as a substitute for bromide of potassium; and should this position but be maintained, it is clear that bromide of sodium will be in very many cases the sedative above all others to be selected."—*Brit. Med. Jour.*

TREATMENT OF SUMMER DIARRHŒA IN CHILDREN.—Dr. A. Muller (*Transactions of Lancaster County Medical Society*). Attention to diet is a very important point in the treatment of diarrhœa. In regulating the diet, we will often remove the cause of the disease, which is commonly induced by improper food, and which may often be remedied by attention to this point alone; while no medicines will be of any account if this be neglected. In the beginning of the attack, gum-water and barley-water form very good articles of food and drink. Milk had better be diluted with water, even to the extent of one-half, as in its pure state it is almost always too strong for the delicate stomach, and yet more sensitive intestines. Rice forms a very good article of food, if thoroughly boiled (especially if the child is not at the breast), as it, as a matter of food, leaves very little excrementitious matter. But if the child is nursing, the mother's milk is sufficient; and by far the best diet for it, provided her health is in a good condition. Keeping the surface warm and the skin in a good condition are very important in the treatment of diarrhœa, hence the utility of warm clothing, warm baths, fomentations to the abdomen, and friction. A flannel bandage around the abdomen is often of great service, both from the warmth it imparts, and the support it gives to the viscera within. The feet should be kept warm. Pure air and an equable temperature are also very essential.

As to medicines, the question of giving an aperient at the onset is to be considered. If the child has been fed on improper food, and we have reason to think that indigestible articles of diet are in the alimentary canal, it is proper to begin the treatment by an aperient, in the shape of castor oil, magnesia, or some one of the preparations of rhubarb. But when the infant is very young, and fed on nothing but the mother's milk, and the evacuations profuse, we must in all cases try to moderate the discharge from the bowels. This can be done by the exhibition of some of the vegetable astringents, either alone or combined with opium in properly guarded doses, and antacids. A very good method of administering opium, is in the form of Dover's powder, where we have the sedative effect of the opium and the diaphoretic action of the ipecachuana. Although some may object to giving opium to a very young child, we meet with cases in which the pain and tenesmus are so great that it is our sheet anchor. Mercurials are also very necessary sometimes where there is a lack of bile in the evacuations, they being white or clay-colored. The form in which I generally give it, is the hyd. cum creta. When we have green and acid stools, some of the antacids are to be given in the form of lime-water, creta prep. or chalk mixture. In cases of high fever, nitre may be given, in the form of nitrate of potash or spts.

ether nitr. When diarrhoea has long existed, the use of turpentine is occasionally of great service, especially if much flatus exists in the bowels. In cases where the head is involved, or likely to become involved, great benefit will be derived from the use of blisters on the side of the head, back of the ears, or the nape of the neck. Cold in the form of cloths wrung out of ice-water to the top and front of the head at the same to be used.—*Am. Med. Digest.*

THE DELIGATION OF LARGE ARTERIES BY THE APPLICATION OF TWO LIGATURES AND THE DIVISION OF THE VESSEL BETWEEN THEM.—Mr. W. J. Walsham, F.R.C.S., Assistant Surgeon to, and Demonstrator of Orthopædic and Practical Surgery at St. Bartholomew's Hospital, writes: "During the past autumn, whilst in charge of Mr. Willett's wards, it fell to my lot to tie the femoral artery three times for popliteal aneurism. In each instance two ligatures were applied, a little less than half an inch apart, and the artery completely divided between them. The ligatures used were kangaroo-tail tendon; the wounds did well; the operations were performed strictly antiseptically; and in each instance the patient made a good recovery. If two ligatures be applied, and the vessel divided between them, all risk of two free a separation of the sheath is absolutely avoided, as one ligature can be applied at the spot where the sheath is separated above, and the other where the sheath is separated below. After the vessel is divided, each cut end retracts, drawing the respective ligatures well into the sheath, thus leaving the blood-supply of no portion of the vessel on the proximal and distal side of the upper and lower ligatures respectively in any way interfered with. The artery is thus placed under very nearly the same conditions as one which has been ligatured in a stump, and exactly under the conditions as one the ends of which have been secured in a wound, and from such secondary hæmorrhage is very rare. Indeed, I am not aware that, after the two ends of a divided vessel have thus been tied in a wound, hæmorrhage, except from the slipping of a ligature, has ever occurred. The normal longitudinal tension of the vessels constitutes another and, I believe, not inconsiderable source of danger in ligaturing an artery in its continuity. A transverse wound of an artery, as first pointed out by Mr. Savory, in consequence of this elastic tension, assumes a diamond shape. Should any part of the ligature cut through the vessel before it has become permanently occluded, this tension, by causing such a cut in the vessel to gape, thereby disturbing the connection of any internal clot that may have formed, or adhesions of the coats that may have taken place, must tend to the production of secondary bleeding. In a case of secondary hæmorrhage, under the late Mr. Callender, on cutting down at the seat

of ligature to secure the bleeding points, the hæmorrhage was clearly seen to be due to such a cause. The vessel, which had been secured by a catgut ligature, had given way opposite the knot (which itself was intact), and a gaping wound one-tenth of an inch wide existed in the walls of the vessel. By applying two ligatures, and dividing the vessel between them, all tension is taken off, and both ends are placed in a state of rest—the most favourable condition for healing. It has been objected that the application of a second ligature and division of the artery detracts from the simplicity of the operation—a point, I suppose, other things being equal, always to be aimed at in surgery. In this instance, such an objection appears to me to be a mere question of sentiment, and, as such, I venture to think, is of little moment, if, as I believe, it is a fact that, by using two ligatures and dividing the artery between them, greater safety is obtained."—*British Medical Journal.*

TREATMENT OF TYPHOID FEVER IN ZIEMSEN'S KLINIK.—At the commencement of the disease, if there be constipation, calomel is usually given in doses varying from 0.5 to 1.5 grm. As soon as the temperature in the axilla passes 39.5° C. (103° F.), baths are employed, generally two or three hours at the temperature of the room, about 16° R. (65° F.) The patient remains *sitting* in the bath about fifteen minutes, whilst the back, neck, and chest are being constantly bathed with the water, as in this manner the heat is extracted more gradually and the inspirations are rendered deeper. In some cases of already existing or threatened cardiac weakness the baths are omitted altogether, but only rarely, however; but the temperature of it raised to 22° to 25° R. (88°—88° F.), and when the patient is in it is gradually reduced some degrees. Some alcohol is given both before and after each bath. If the baths fail to produce a decided effect on the temperature, antipyretics are administered. Koth's mixture—which consists of acid carbolic and sp. vini, aa 1 grm.; tr. iodi., gtt. x.; tr. aconiti, grm. j.; aq., grm. 50; syr., 10 grm.; ol. menth, gtt. ij., M., of which a teaspoonful is given hourly—has been extensively employed, but quinine still holds its ground. It is given, not too frequently, in full doses of 15 to 30 grs. every second day. If diarrhoea be profuse, it is checked by the use of starch enemata, to which have been added 20 m. of tinct. opii. This latter also serves the purpose of calming the patient, and thus rendering the attendance less laborious, and may be repeated several times in the course of twenty-four hours. The nourishment consists mostly of broths, with yolk of egg and milk. Wine is given from the commencement, the quantity and alcoholic strength mounting with the cardiac weakness. Stokes' mixture and freshly-pressed beef-juice are favorites in the height of the fever, or when collapse is threat-

ened. The diet remains unaltered until the eighth day after the subsidence of the pyrexia, after which easily-digested farinaceous and flesh foods are given; whilst the ordinary sick diet is not returned to until after the lapse of another week.—*The Medical Press*.

CHROMIC ACID IN AFFECTIONS OF THE TONGUE.

—Mr. Henry T. Butlin, F.R.C.S., has used chromic acid in certain affections of the tongue, with markedly good effect. In June, 1881, he treated two cases of glossitis with a ten grain solution of chromic acid in water, painted on the sore areas of the tongue three or four times a day. Both cases improved. A case of secondary syphilitic, deep and jagged ulcers of the tongue, and ulceration of the inside of the cheek, which showed no improvement under hyd. c. cret., iodide of potass., or liq. hyd. bichlor., were, after a week's treatment with chromic acid solution, almost completely healed. Another case of flat mucous tubercles, due to secondary syphilis on the right border of the tongue, which had resisted treatment with hyd. c. creta for about three and a half months, was almost completely cured in three weeks.

Mr. Butlin has used chromic acid in several different inflammatory conditions of the tongue, in many cases with most gratifying success. In 27 cases, 20 have been cured or greatly relieved, 7 having received little or no benefit. The seven cases were either of chronic superficial glossitis, or of tertiary syphilis. The twenty include seven of chronic superficial glossitis and thirteen of various secondary syphilitic affections. Mr. B. concludes that chromic acid cures with marvellous rapidity secondary affections, ulcers, mucous tubercles, and condylomata. It produces no appreciable effect on tertiary affections, gummata, extensive ulcers, or tubercular syphilides. Some cases of chronic superficial glossitis, with slight ulceration and renewed inflammation are rapidly benefited by it. In cases of glossitis in which the tongue surface is attacked by a fresh inflammation of great severity, glycerite of boracic acid and soothing remedies are more suitable; chromic acid rendering these worse. He reports one case of tertiary syphilitic ulcers of the tongue which was cured in about two months by combined chromic acid and mercury treatment, although it had obstinately resisted purely anti-syphilitic treatment for many months. The strength of the solution usually employed is grs. x— $\bar{3}$ j water; in some cases grs. xv— $\bar{3}$ j. The patient is told to paint the diseased parts three or four times a day with a camel's hair brush dipped in the solution. There is seldom any pain or discomfort; sometimes a little smarting at first.—*Practitioner*, Mar., 1883.

PREVENTION OF LACERATION OF THE PERINÆUM.

—Mr. Alexander Duke, M.K.Q.C.P.I., Obstetric Physician to Dr. Stevens' Hospital, Dublin, re-

marks: "The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the text-books on midwifery) is this:—When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and at the onset of a pain, draw back the perinæum firmly, but gently, towards the coccyx, relaxing the tension gradually as the pain lessens, till the next ensues, and so on, till I can draw back the perinæum with very slight effort. I thus tire out the muscular structure, and produce sufficient relaxation for the head to pass.

"In most cases so treated there is no danger of the perinæum, but when the pubic arch is narrow, (which can be easily determined) I take the additional precaution of raising the patient's left hip, and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction of lard or vaseline, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx, or a finger in the rectum, leaving the perinæum untouched. It has always seemed anomalous to me that the perinæum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

"The drawing back of the perinæum produces no additional pain to the patient, as it is done during an uterine contraction, and I feel sure that if nurses and students were educated as to the proper way of preparing the perinæum previous to its distension with the presenting part, we should see and hear less of lacerated perinæum."—*British Medical Journal*.

A NEW METHOD FOR EXSECTION OF THE ANKLE-JOINT.—The nature of the inflammatory disease making it necessary to resect this joint is such that all tissues involved must be thoroughly removed or good results cannot be expected. To carry out this essential a number of operations have been devised, but in every instance has the surgeon been compelled to divide structures that were indispensable to a good joint, or he has not opened the joint and exposed it to view fully.

Prof. F. Busch has lately devised a new method for operating which has been very satisfactory so far, and at the same time avoids all of the above mentioned embarrassments of the older operations.

The joint is opened without separating a single tendon. An incision is made extending from one malleolus to the other, passing under the foot instead of over the dorsum, as in most other operations. On the sides of the foot the incision extends only through the skin, while on the plantar surface it

must be carried down to the bone. The tendons are now carefully loosened from their attachments to the bones, and dislocated forward, without disturbing their relative position or the grooves in which they run. The next step is to saw through the calcaneum from below back toward the posterior ridge of the calcis; now the joint can be opened by flexing the foot. The synovial membrane, if diseased, can be removed in toto and the joint can be thoroughly inspected.

In a case referred to by the author, he removed the external malleolus, the calcis, and the entire synovial membrane; the wound was then thoroughly disinfected, the tendons replaced, and the cut surfaces brought together and held in position by silver sutures. The tendons showed no signs of displacement after the operation.—*St. Petersburg Med. Wochenschrift*.—*Cin. Lancet*.

PERFORATED FELT JACKET IN SPINAL CURVATURE.—A case at present under treatment, illustrates some of the advantages to be derived from the use of these jackets, combined with muscular exercise. The patient, a female child, aged 11, came under my care in August, 1882, suffering from considerable excurvation in the dorsal region, for which she was wearing, at the time, a steel spinal support with arm crutches, by which her shoulders were being pushed almost up to her ears. A perforated felt jacket was made for me by Mr. Rorke, of North Street, Fitzroy Square, and instructions were given that she should exercise with the trapeze several times a day for a quarter of an hour at a time. Already in five months a decided improvement has taken place. The prominence in the back has diminished in size and elevation by half an inch, the shoulders are no longer pushed up to the ears, and the whole body has grown. The child can move her limbs with the greatest freedom, and much prefers the jacket to any instrument she has worn. Thus, in a most unpromising case, no resort to the surgical instrument maker is required beyond the first manufacture of the jacket, which can be softened and reapplied by the surgeon as often as necessary, and which is taken off by the mother once a fortnight for purposes of cleanliness, while necessary exercise is not interfered with. I notice that in a recent pamphlet by Mr. Noble Smith, felt jackets are spoken slightly of, and their porosity in particular is declared to be "a myth." However true this may be of the material originally used for these jackets, it is, I believe, a mistake in regard to the perforated felt, in which the pores are good sized holes perfectly visible to the naked eye. For efficiency, lightness and cheapness, these jackets leave, I venture to think, little to be desired.—H. N. HARDY, F.R.C.S.E., *Brit. Med. Jour.*

the Rev. William Kirk Hobart, LL.D. The object of the volume before us is to prove from internal evidence that "The Gospel according to St. Luke" and "The Acts of the Apostles" were written by the same person, and that the writer was a medical man. The plan of the book may be briefly described, and we would take the opportunity of stating our belief that the mode of dealing with the subject is eminently scientific and, so far as we know, novel. All the words which are found only in the Third Gospel, or in "The Acts of the Apostles," or almost exclusively in these two books, are named, and quotations are given from Hippocrates, Galen, Aretæus, and Dioscorides to show that the same words were in common use among medical writers to express the same meaning. The result of this study is certainly to prove beyond reasonable doubt that in the Third Gospel and in "The Acts of the Apostles" the descriptions of the miracles of healing were written by one who not only was familiar with the diseases in question, but who used such language as it would be unreasonable to suppose any one but a medical man could have had at his command; and, further, that in dealing with non-medical subjects he wrote in a style common in the Greek medical writers of the time, and one which a physician would be likely to employ. This peculiarity of phraseology being identical throughout the two books in question, leaves no doubt that they are the work of the same hand. A very interesting note is appended at the end of the volume, showing the probability that, in accompanying St. Paul on the three occasions referred to in the Acts of the Apostles, St. Luke was present as his medical adviser.—*Medical Times and Gazette*.

NAPHTHOL IN ITCH. — The *Med. Times and Gaz.*, February 3, 1883, says:—Introduced by Prof. Kaposi, of Vienna, naphthol has been substituted by him for tar in some affections of the skin, as eczema, psoriasis, prurigo, and especially itch. It has scarcely any odor, and even after long exposure to air only becomes of a pinkish color, which does not permanently stain the linen. Prof. Hardy, it is stated in a *thèse* by Dr. Guérin, has substituted a very simple formula for the complicated one of Kaposi, consisting in vaseline 100 parts to 10 parts of naphthol. The pulverized naphthol is dissolved in half its weight of ether, and is then mixed with a portion of the vaseline, and heated to 30° to 40° Cent., until the ether is entirely evaporated. The rest of the vaseline is then added, and the mass carefully triturated. The homogeneous pomade which is produced is kept secluded from the air. It may be applied at all periods of itch, whether complicated or not; and it is applicable also to the eruptions which supervene in the course of itch, and for which sulphur ointment is unsuited. The furrows are by this

THE MEDICAL LANGUAGE OF ST. LUKE.—By

ointment rapidly freed of their inhabitants, and other eruptions disappear. The treatment lasts from ten to fifteen days, which is very much longer than Prof. Hardy's rapid treatment by sulphur; but when we consider how long the itching persists often after the cure by sulphur—sometimes obstinately continuing for months—the treatment by naphthol is practically the shorter of the two. M. Guérin has never observed any ill effects upon the kidneys result from naphthol. — *Med. and Surg. Reporter*.

ERGOT IN THE RADICAL CURE OF HYDROCELE. —J. E. W. Walker, M.R.C.S.E., L.S.A., late H. M. 55th Regt., writes:—"In bringing this matter before the profession, I feel bound to admit that, but for a curious accidental circumstance, the agent might never have presented itself to my notice. In the year 1875, I proposed to operate upon a patient, aged 65, for the radical cure of hydrocele of the tunica vaginalis. The disease had existed for about ten years, and had been repeatedly emptied by other surgeons. At this time I removed, by the trocar and canula, about twelve ounces of serum, and, by accident, took from my pocket a bottle containing about two drachms of liquor ergotæ (Battey) in the place of the same quantity of tincture of iodine, which it was my intention to throw into the cavity. On my return home, I discovered the mistake, and watched the patient for some hours at intervals. No inflammatory state occurred, and there was entire absence of pain, so that I allowed my patient to return to his ordinary occupation the next morning. To the present time there has been no return of the abnormal secretion. I have since, on two occasions, used the same plan with perfect success, and I attribute the cure to a specific action, exerted by ergot, which re-establishes the balance between secretion and absorption."—*Brit. Med. Jour.*

CASTOR OIL AND GLYCERINE AS A PURGATIVE. —Dr. Soper, in the *LANCET* for Feb. 10th, says:—"After many months' experience, I now feel justified in bringing to your notice the great advantages of a combination of the above two drugs in equal proportions to act as a purgative. Glycerine has great therapeutic value, especially in its solvent properties, and this combination renders it especially valuable. In regard to castor oil, I think a great mistake has been made in the largeness of dose administered, and in this mixture only half a teaspoonful is required combined with an equal bulk of glycerine. In all cases of chronic constipation, hæmorrhoids, and anæmia, it has proved most useful. A scybalous motion is apparently emulsified, and is passed with the greatest ease. I have also given half-teaspoonful doses in the early stages of bronchitis, which seem to promote exudation from the tubes, and is certainly expectorant.

My great difficulty hitherto has been the obstinacy with which the mixture becomes a mixture, and it can only be made by placing the bottle in hot water and violently agitating.

ANTISEPTIC MIDWIFERY.—Strict antiseptic midwifery is practiced in the British Lying-in Hospital, according to the *British Medical Journal*. Each patient is delivered under a carbolic spray of one in sixty; she is twice daily syringed out with a two per cent. solution from the first day after labor. Every patient receives three times a day a mixture of ext. ergotæ liq. gtt. x. tr. opii gtt. v.; quiniæ sulph., grs. ij.; acidi phosphor. dil. gtt. x; aquæ, ʒ i. According to the presence of any idiosyncrasy in the patient, this mixture is modified. In each ward of the hospital there is continually playing a carbolic spray of one in eighty. All washings of the genitalia are done with a one in sixty carbolic solution. The beds consist of horse-hair mattresses, on springs. Each ward contains four beds and is disinfected with burning sulphur, the floors being washed over with carbolic solution after three relays of four patients.—*Weekly Med. Review*.

TREATMENT OF ASTHMA.—Dr. William M. Welsh (*Medical Bulletin*) gives the following formula for the treatment of asthmatic attacks: R. Stramonii foliarum, ʒ x.; potassæ nitratis, ʒ v.; seminis fœniculi, ʒ ss.; sacchari, ʒ ij. M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve so as to get rid of the stems and coarser fragments. All the ingredients should then be rubbed together in a mortar without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head. It combines, the author claims, the good effects of nitre and stramonium.—*Am. Med. Digest*.

ADMINISTRATION OF ANÆSTHETICS.—The administration of an anæsthetic in a crowded amphitheatre is a piece of inhumanity to the patient. Experience has shown that a crowd of faces and the sight of the instruments about to be used—the horrible paraphernalia—greatly increase the danger of paralysis of the heart.—*Bartholow*.

GELSEMIUM.—Gelsemium is recommended in irritability of the nervous system with a determination to the brain, causing flushed face, contracted pupils, supra-orbital neuralgia, and is one of our best remedies. In hysterical spasms and in many cases of spermatorrhœa, it is very efficient.—*Chicago Medical Times*.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

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TORONTO, MAY, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

CONTAGIOUSNESS OF CONSUMPTION.

A disease which continues to destroy its millions year by year "through the rolling ages," must be of absorbing interest to every thinking mind. Notwithstanding a general advance all along the lines, the cause and prevention of pulmonary consumption are still unknown quantities. Of late a good deal has been said about micro-organisms and tubercle bacilli as being the active agents in the origin and spread of this terrible enemy of our race, but proof of such being the case is lacking. The existence of bacilli cannot be accepted as proof of contagiousness. Even if it were true that these bacilli, are capable of developing the disease, it would be still necessary to show that they existed only by propagation, and never originated spontaneously. Were pulmonary consumption a contagious disease exclusively, it would be a preventable disease, and the discovery of such a fact would be hailed as the greatest boon ever conferred upon man. Unfortunately such does not appear to be the case. The theory is a pretty one, but it does not stand the test of experience. It is quite possible that this micro-organism and bacilli business is a little overdone as to its ultimate consequences. As before stated, the existence of bacilli afford no proof of the contagiousness of consumption. Far be it from us to make light of the work of investigators in this direction. On the contrary, we believe this new field is likely to yield results productive of great good. Let the cause of a given disease be known, and the chances are that it may be prevented, at least in many cases.

If not preventable, at all events, knowledge of its origin is likely to lead to a more rational mode of treatment.

Whatever may be said in favor of the theory of contagion by others, no such belief is entertained by those who have had large opportunities for observation in hospital practice. Amongst these may be mentioned Dr. Yeo, of King's Hospital, London, and Dr. Herbert Davies, consulting physician to the London Hospital, and to the Royal Hospital for Diseases of the chest. Dr. Yeo has published a book on the subject, in which he takes strong ground against the theory of contagion, for which he contends there is no reliable evidence. Dr. Yeo discusses Koch's demonstration of the "virus" of tubercle in the form of tubercle-bacillus, and the distinction between tuberculizing and non-tuberculizing processes of the disease. It is well known that consumption is a most virulent disease in Southern Europe, where it is regarded as contagious. The great prevalence of the disease in southernly countries, Dr. Yeo is disposed to attribute to the favorable influence exercised by heat in the propagation of the tubercle-bacillus. According to Koch the tubercle-bacillus requires a temperature above 86° Fah. for its propagation.

At first sight this may seem to clash with our experience in this northern climate, where the winter is the season most favorable to the development of the disease. So well is this known, that consumptives who can afford it are advised to go south early in the season. Cold, in the abstract, however, does not aid the development of the disease. That extreme cold does so indirectly, every one must acknowledge. To a diseased and broken down constitution cold is an extinguisher of the vital forces, consequently the sufferer is driven within doors, and thus is deprived of two most important elements of treatment, namely, exercise and pure air. He is confined within the narrow limits of a super-heated room by day, and too often made to breathe an atmosphere below the freezing point at night. No wonder then, that the disease grows apace as soon as winter sets in. Nor should it be thought anything strange, nor evidence of contagion, should others sharing the surroundings of the patient become victims of the disease. The greatest sanitary conundrum in cold climates is—How can we live so as to have both warmth and purity of air?

Dr. Davies gives the following facts regarding the attendants at Brompton Hospital for Diseases of the Chest : Dr. Edwards was resident physician for seventeen years. He remembers the case of fifty-nine medical assistants whose duration of office averaged six months. All but two are living, one dying from aneurism, and the other from some unknown disease. The present chaplain has held office for seventeen years, and his two predecessors are living. The matron has been resident for sixteen years, and the two former matrons are living. Of the nurses now in residence, one has been there 24 years; two, 12 years; one, 8 years; one, 7 years; one, 6½, and one 5 years. No under-nurse has died of phthisis. The head nurses sleep each in a room containing 50 patients, and two only are known to have died—one from apoplexy, and one some time after she had left the hospital, and after an unhappy married life, of phthisis. All but two of the physicians who have attended the in and out patients during seventeen years are living. One died from causes unknown, the other from causes unconnected with disease of the lungs. These, and similar facts, which come to us from other quarters, afford evidence about as conclusive as evidence can be, against the theory of contagion. It would appear that after all, as in the past so in the present, the question is not how to avoid infection, but how to ward off the disease in the predisposed, and how best to combat it when it once obtains a foothold?

A few practical lessons may be drawn from these facts. In the first place, it is a great mercy to those suffering from pulmonary consumption that the theorists have thus far failed to establish the contagiousness of the disease. Had it been otherwise it would have been necessary to treat them as lepers by isolating them from their fellows, which would have been a great hardship. There can be no question however of the great impropriety of close contact with the well, especially should occupancy of the same bedroom be rigidly avoided. Indeed all the sanitary regulations deemed needful in other diseases should be practised in this, both for the sake of the sick and the well. The statement that excessive heat favors the development of the disease, should be a standing warning against the close super-heated rooms in which, not only consumptives, but northern people generally spend the winter months.

THE BRITISH MEDICAL BILL.

The medical profession in Great Britain is to be congratulated in the near prospect of the passage of a most excellent Medical Act Amendment Bill. It has already passed the second reading in the House of Lords. Our British exchanges are almost unanimous in support of the measure, and regard it as a great reform. One of the principal features in the contemplated Amendment Bill is the establishment of Medical Boards, one for each part of the United Kingdom, for the purpose of holding examinations, and for such other purposes as are mentioned in the Act. In England fifteen persons, in Scotland eleven persons, and in Ireland eleven persons shall constitute the Boards respectively, to be chosen as follows :—In England, two by the University of London, two by Oxford, two by Cambridge, one by Durham, one by Victoria, (Manchester), three by the Royal College of Physicians, London, three by the Royal College of Surgeons, England, and one by the Apothecaries Society of London. In Scotland, three by the University of Edinburgh, two by the University of Glasgow, two by the University of Aberdeen, one by the University of St. Andrews, one by the College of Physicians, Edinburgh, one by the College of Surgeons, Edinburgh, and one by the Faculty of Physicians and Surgeons, Glasgow. In Ireland, two by the University of Dublin, two by the Royal University of Ireland, three by the King's and Queen's College of Physicians, three by the Royal College of Surgeons, and one by the Apothecaries Hall of Ireland. The Boards so chosen shall hold office for five years when a new election shall take place. The Medical Board of each part of the United Kingdom shall make regulations for holding final examinations for the admission of candidates to registration as medical practitioners, the nature and conduct of such examinations, the appointment of examiners, etc. The Bill also provides that no candidate shall be required to adopt or refrain from adopting the practice of any particular theory of medicine or surgery; women shall be admitted on precisely the same terms as men, and so far as practicable a uniformity of standard shall be aimed at in the final examinations held by the Medical Boards of the several parts of the United Kingdom.

For the purpose of exercising due control over

the Medical Boards, and for other purposes of the Act, a Medical Council shall be established, consisting of eighteen persons, six to be nominated by the Crown, two to be elected by the registered practitioners resident in England, one by the registered practitioners of Scotland, one by the registered practitioners of Ireland, four by the Medical Board of England, two by the Medical Board of Scotland, and two by the Medical Board of Ireland. The Medical Council shall be elected for a period of five years. The Medical Council shall, in addition to other duties imposed upon it by the Act, visit from time to time any examinations conducted, or recognized for the purpose of the Act, and enquire into the sufficiency thereof. The Medical Boards have power to regulate the course of medical education, subject to the control of the Medical Council, and approved by the Privy Council, for example, the preliminary examination of students, the course of studies to be pursued, the examinations to be passed, etc.

With reference to the management of the Registrar, we are pleased to observe that the Council is to have power not only to erase the name of any person convicted of felony or misdemeanor, but also to erase or suspend the name of any one who has been guilty of any infamous or disgraceful conduct in a professional respect, subject to an appeal to the Privy Council. This is a power which should be centred in all such governing bodies, and we hope some day to see this latter cause engrafted in our Ontario Medical Act. Such a measure is very much needed at the present time, to prevent some of our registered practitioners from prostituting their high calling to subserve the interests of the villainous quacks that infest the country.

As to the powers of Colonial Legislatures, the Bill provides that after the passing of the Act, any Colonial Legislature may make such regulations as it thinks fit with respect to the admission of registered medical practitioners under this Act, to practice in such colony, subject to this qualification, that any registered practitioner who at the date of such regulation being made, is entitled to practice in such colony, shall not be prevented from practicing by any such regulations. We would therefore draw the attention of graduates who purpose going to Great Britain to obtain qualifications to enable them to practice in Ontario upon registra-

tion, that this enactment will interfere with their programme.

The Act also provides for the registration in the British register, and the privileges of the same, without examination of such colonial qualifications as would entitle the holders to practice in the colony or colonies in which they were obtained, and such as may be recognized for the time being by the Medical Council for that purpose.

ONTARIO BOARD OF HEALTH.

We have received the first annual report of the Board of Health of Ontario. It is divided into three parts. Part I., (the report proper) treats of the organization of the Board; the collection and dissemination of sanitary information; investigations into the causes of, and remedies for, various outbreaks of disease; action taken in relation to reported unsanitary conditions; collection of disease statistics; the relation of the Board to various classes, and the work to be done. Part II. consists of eight appendices, such as reports of commissioners instituted by the Board, and copies of documents, pamphlets, and circulars issued by the same. Part III. contains copies of the addresses, lectures and papers delivered by members of the Board or under its auspices. While the volume as a whole, contains a good deal of useful information, it displays a marked want of acuteness and tact in investigating and enquiring into the outbreaks of epidemics, especially of typhoid at Stratford and Lambton Mills. We are not informed of any efforts to trace the first source of the outbreaks,—to learn whence came the germs giving rise to the first cases. The prevailing unsanitary conditions which may be found almost everywhere, and which in accordance with present most generally approved authorities only afford ready facilities for the multiplication and spread of the disease germs, might easily enough have been described and the remedies suggested by any local physician, or even by an intelligent layman.

The daily *Globe*, in reviewing the report says, as if in sarcasm, "the only erratic part of the pamphlet is the 'errata' on the first page. Where they are not simply compositor's blunders that nobody could mistake, they are either useless or pedantic." We have only to say that the report as a whole is a crude "erratic" jumble, and is far from

creditable to its authors, especially when it is remembered that Wm. Oldright, M.A., M.D., Prof. of Italian, is at the head of the Board, and Dr. Bryce, M.A., at the foot, both graduates of Toronto University. The "errata" given on the first page, numerous as they are, might have been greatly extended. Even our city contemporary, the chairman's former advocate and supporter through good and evil report, has had to acknowledge in its April issue, the disjunctive and rambling nature of the report.

MEDICAL EXAMINATIONS.

We give below the names of the candidates who have successfully passed the primary and final examinations respectively of the various colleges and examining bodies in Canada, so far as we have had returns:

MCGILL UNIVERSITY, MONTREAL.—M. D., C. M.—Holmes *Gold Medallist*, C. E. Cameron; *Prizeman*, J. B. Loring; *Hon. Mention*, R. B. Struthers, J. S. Lathern, J. C. Bowser, J. Gray, G. Carruthers, J. J. Gardner, W. G. Henry, W. McE. Scott, J. R. Johnson; *Pass*, C. E. Allan, G. A. Gearden, C. B. H. Hanvey, H. J. Harrison, A. J. Hopkins, J. J. E. Maher, O. Martel, A. McLeod, A. MacNeill, J. W. MacLean, A. McDonald, F. S. Muckey, S. S. C. Phippen, W. K. Ross, A. J. Rutledge, W. H. Shaver, G. A. Sihler, A. Stewart, E. S. Wood.

Primary.—*Prizeman*, E. G. Wood; *Sutherland Gold Medallist*, R. F. Ruttan; *Hon. Mention*, W. A. Ferguson, J. H. Darey, F. G. Finley, H. E. Trapnell, H. T. Hurdman, T. A. D. Baird, F. N. Burrows, M. C. McGannon, F. M. Harkin; *Collection of Plants*, H. E. Trapnell; *Practical Anatomy*, F. G. Finley; *Pass*, J. H. B. Allan, R. H. Arthur, J. A. Barrett, G. A. Cassidy, W. D. Daly, D. W. Eberts, W. Groves, E. O. Hallett, A. E. Hanna, J. A. Hutchison, R. T. Irvine, C. H. Johnson, H. D. Johnson, J. H. Jolliffe, W. H. Klock, T. H. Landor, D. P. Merritt, N. McCormack, W. McClure, J. T. McKenzie, J. H. McLellan, D. L. McMillan, T. O'Brien, A. B. Osborne, James Park, F. H. Powell, A. M. Robertson, L. D. Ross, J. M. Scott, I. C. Sharp, J. L. Shibley, J. A. K. Wilson.

Botany Prize (first year), C. W. Wilson and J. A. Kinlock; *Practical Anatomy*, A. L. Howey; *Morbid Anatomy*, C. E. Gooding.

BISHOP'S UNIVERSITY.—M.D., C.M.—J. A. Caswell *Wood Gold Medallist*; E. Sirois, *Chancellor's Prize*; P. E. Minckler.

Primary.—E. E. Bronstorff (David Scholar-

ship); R. C. Blackner, C. B. Ball, and E. O'B. Freleigh (Honors); P. E. Minckler and W. Patterson.

TRINITY UNIVERSITY.—M.D., C.M.—W. M. Brett, J. Urquhart, A. F. Pringle and T. W. Duncombe

M.B.—Frank Krauss (*Gold Medallist*), B. H. Scott, J. A. Lea, J. E. Jenner, E. M. Hoople, L. Backus, S. W. Lamoreaux, F. H. Sawers, H. R. Casgrain, T. D. Meikle, T. H. Robinson, R. Hislop (*Honors*); S. W. McConochie, C. E. B. Duncombe, D. F. Rae, A. Hawk, J. H. McCullough, E. B. O'Reilly, W. F. Freeman, T. C. Cowan, W. F. Dickson, R. M. Fairchild, G. J. Charlesworth, A. G. Elliott, I. A. Thompson, and J. B. Gullen

Primary.—Frank Krauss, J. Kennedy, C. W. S. Harrison, and C. A. McBride.

QUEEN'S UNIVERSITY.—M.D.C.M.—W. G. Anglin, C. Clancy, J. Cryan, L. Davis, H. M. Freeland, D. C. Hickey, J. F. Kidd, G. S. McGhie, A. McMurchy, T. A. Moore, T. A. Page, R. S. Smith, W. Young.

VICTORIA UNIVERSITY.—M.D.C.M.—J. M. Jackson, R. Hearn, A. D. Watson, H. S. Clerke, W. Cuthbertson, E. M. Hewish, J. S. Draper, S. S. Stewart, J. E. Case, W. Jaques, F. P. Drake, A. L. Brown, Augusta Stowe, C. S. Grafton, George Wyld, J. J. Wild, C. E. Cochrane, J. H. C. Wilmoughby, Wm. Kennedy.

Primary.—A. R. Harvie, T. W. Simpson, H. S. Martin, F. Hixon, W. A. Goodall, S. S. Wattam, J. O. Orr, J. A. Burgess, J. E. Ellis, J. H. C. Wilmoughby, J. Verner, S. M. Hay, G. G. Hutton, H. A. Wright, J. S. Freebourn, F. Beemer, B. B. Pattullo, A. T. Rice, C. W. Hunt, J. R. Phillips, D. D. Ellis, O. Grain, J. W. Campbell, Thomas Verner, J. Barber, Jos. Hord.

TRINITY MEDICAL SCHOOL.—*Fellowship Diploma*—J. E. Jenner (*Gold Medallist*), B. H. Scott (*First Silver Medallist*), S. W. McConochie (*Second Silver Medallist*), T. H. Robinson, L. Backus, A. Hawk (*honors*); S. W. Lamoreaux, T. D. Meikle, R. Hislop, D. F. Rae, G. J. Dickson, J. H. McCullough, T. C. Cowan, C. E. B. Duncombe, R. M. Fairchild, I. A. Thompson, and G. J. Charlesworth.

Primary.—J. R. Logan (*Scholarship & Mat. Med. Prize*), W. M. Brown (*Baptist Prize in Chemistry*), H. H. Hawley, S. H. Mott, C. F. Snellgrove, F. A. Dewar, S. A. McKeague, and Robert Owen (*First-class honors*); G. A. Bingham, D. O. R. Jones, F. Campbell, W. H. Pepler, G. L. Airth, T. Owens, J. M. Cochran, W. E. Sprague, G. J. Paul, J. McCullough, A. B. Wilson, G. Fierheller, J. Lindsay, H. D. Leitch, A. T. Little, and R. J. Lockhart (*Second-class honors*); P. H. Salter, J. S. McCullough, J. E. W. Anderson, T. M. Lawton

J. A. Couch, J. Park, C. J. McIntyre, J. C. Bell, J. Johnston, A. Gillespie, J. E. Brown, A. V. Delaporte, W. J. Chambers, D. W. Carmichael, A. E. Stuart, A. McKillop, C. Trow. Several others passed on certain subjects.

First-year Scholarships.—S. Scott (*First Scholarship*), R. Lucy (*Second Scholarship*). 53 candidates passed the first year's examination.

TORONTO SCHOOL OF MEDICINE.—*Fourth year.*—W. J. Robinson, (Scholarship); J. M. Jackson, (Honors).

Third year—R. Hearn, (Scholarship); J. W. Clerke (Honors).

Second year—L. Carr, (Scholarship); H. Bascom, J. H. Howell, (Honors); J. G. Sutherland, G. A. Carveth, W. A. Goodell, J. S. Freebourn, J. R. Harvie, C. W. Hunt, A. C. Krick, and D. Ellis.

First year—D. R. Johnston, (Scholarship) 39 candidates passed the first year's examination.

COLLEGE OF PHYSICIANS AND SURGEONS, ONT.—*Final for License*—Anglin, W. G., Bates, F. D., Belt, R. W., Bell, W. D. M., Bray, J., Colver, M. K., Casgrain, H. R., Clerke, H. S., Case, T. E., Carleton, W. H., Chafee, C. W., Cryan, J., Cuthbertson, W., Derby, W. J., Drake, F. P., Dickson, W. F., Emory, W. J. H., Freeman, W. F., Fairchild, R. M., Frost, R. S., Gullen, J. B., Gordon, C. M., Hansler, J. E., Hearn, R., Hislop, R., Hickey, D. C., Jackson, J. M., Jaques, W., Kidd, J. F., Krauss, F., Lepper, W. J., Meikle, T. D., Meldrum, J. A., McConochie, S. W., McMurchy, A., O'Reilly, E. B., Rattray, J. C., Ross, W. A., Robinson, T. H., Robinson, W. J., Spilsbury, E. A., Stowe, Augusta, Sawers, F. H., Wilson, J. D., Whitely, J. B., Woods, E. R., Ray, J. W.

Primary.—Bell, W. D. M., Bingham, G. A., Burgess, J. A., Beemer, F., Beatty Elizabeth, Brown, W. M., Carveth, G. A., Couch, J. A., Courtenay, J. D., Cane, F. A., Cherry, G. A., Cochrane, J. M., Clerke, H. S., Case, T. E., Chafee, C. W., Derby, W. J., Dewar, P. A., Draper, J. S., Duff, H. R., Elliott, J. E., Everts, D. W., Eede, T. E., Emory, W. J. H., Fairchild, R. M., Fergusson, J., Fierheller, G., Goodall, W. A., Gunne, W. J., Gordon, C. M., Hawley, H. H., Hixon, E. F., Harvie, A. R., Howell, J. H., Hunt, C. W., Herald, J., Hauks, A. R., Harkin, Fred., Hall, E. A., Harrison, W. S., Hislop, R., Hickey, D. C., Johnston, G. L., Jones, D. O. R., Johnston, F. H., Kinsely, A. B., Krick, C. A., Knight, J. H., Krauss, F., Leitch, H. D., Lake, A. D., Lockhart, R. J., Logan, J. R., Murray, T. W., Martin, H. S., Minchin, D., McGillivray, Alice, McGannon, M. C., Owens, T., Orr, J. O., Paul, J. J., Phillips, J. R., Patterson, J. W., Palmer, G. F., Robertson, W. N., Ruttan, R. F., Rattray, J. C., Stewart, R. L., Stewart, S., Suther-

land, J. G., Smith, Elizabeth, Sterling, J. E., Trow, C., Webster, H. E., Wilson, A. B., Watson, J. A., Wattam, G. S.

THE HIGHER EDUCATION OF WOMEN.—The *Medical and Surgical Reporter*, Philadelphia, gives the following on this subject in an editorial of recent date :—"We trust that we will be pardoned (for we mean no disrespect whatever) when we say that it is not the true womanly woman, but rather the masculine woman, who hankers after this higher education. We are speaking in all sincerity, from a scientific standpoint, and mean no disrespect to any one.

We clearly recognize two distinct types of woman-hood, between which all degrees of each are to be found. On the one hand, the timid, confiding, trusting woman, who, after completing her school or convent education, soon comes to realize that her mission in this world is a domestic one, with all the mingled trials and pleasures which that word implies. On the other hand, we see the self-confident, self-asserting, self-reliant, fearless, masculine woman, who feels irresistibly impelled to push forward into the realms of science, and for whom the domestic duties have but a secondary attraction. These two types are both admirable; the one lovable, the other grand and noble. The first never gives a thought to the "higher education of women;" the second desires and demands it. Let her have it. If she be capable, she will make her mark; if she be not, Darwin's beautiful law will come into play, and she will disappear.

In a word, the number of women who demand scientific education are comparatively few; they possess many masculine characteristics, and are entitled to masculine privileges. If you give them the chance they may, perhaps, fulfil their earthly mission; if you deny them, you do them an injustice, by refusing a request the granting of which could do them no harm. Therefore again we say, grant their request."

HOSPITAL APPLICANTS.—Dr. Canniff desires to say for the information and guidance of the profession of Toronto, who wish to obtain the admittance of any one to the hospital, that according to the by-law defining his duties he has to examine all applicants. It is therefore unnecessary to give a certificate of disease except in cases of internal ailments, such as uterine diseases, also in cases

of eye and ear affections. But it is necessary for the applicant to furnish a certificate of indigency and of having lived in Toronto, and if the physician likes to give this, it will save the applicant the trouble of seeking it elsewhere. He is at his office, City Hall, every day from 10 to 12 and from 3 to 4, Saturdays from 10 to 12, where applications must be made. He cannot carry the order book away to his house, and begs to be spared the necessity of requesting persons who come to his house to call at the office. He has to spend no little time in visiting applicants who often live in the outskirts of the city.

UNPROFESSIONAL.—A correspondent from Newcastle sends us a letter, too late for insertion under its proper head, complaining of unprofessional conduct on the part of a confrère. The complainant states that in a certain case he had amputated a portion of the foot, and the physician alluded to made a visit to the patient without complainant's knowledge and during his absence, and gave his opinion on the case. The complainant also states that this is not the first time his confrère has interfered in this way. It is wholly unnecessary to say that such conduct is decidedly unprofessional, and we cannot but think there must have been some mitigating circumstance in the case. Medical practitioners cannot be too careful in refraining from making friendly visits to patients under the care of other physicians. We have known a good deal of ill feeling caused by such visits, even where there was every intention to avoid answering any questions, or expressing any opinion in regard to the case.

MINISTER OF AGRICULTURE.—It is rumoured that Dr. Orton, M.P., for Wellington, Ontario, is likely to receive the appointment of Minister of Agriculture. We hope the rumour may prove well-founded, as the position of Minister of Agriculture is one of great importance, and specially adapted for a medical man, inasmuch as it has to do not only with agriculture, but also with vital statistics, immigration, quarantine, exportation and importation of live stock, etc., etc. As Dr. Tupper is about leaving the Cabinet, a more favourable opportunity cannot occur for the appointment of a medical man, and we know of no one better qualified from length of service and experience in parliamentary matters than Dr. Orton.

HORSFORD'S ACID PHOSPHATE IN SEA-SICKNESS.

—The use of this remedy in sea-sickness has been specially recommended by many eminent physicians. Dr. Adolph Ott, member of International Jury at the World's Exhibition in Vienna, used the acid phosphate for sea-sickness, among the passengers, during a passage across the Atlantic, and said: "In the plurality of cases, I saw the violent symptoms yield, which characterize that disease, and give way to a healthful action of the functions impaired. I was rather surprised to find it a remedy for sea-sickness, but as there can be no longer any doubt of the fact, I think that the widest circulation should be given to it."

APPOINTMENTS.—Dr. F. W. Campbell has been appointed Dean, and Dr. R. A. Kennedy Registrar, of the Medical Faculty of the University of Bishop's College, Montreal.—W. H. Snow, M.D., of Hamilton, Ont., late House Physician at Bellevue Hospital, has been appointed First Assistant to the Chair of Gynæcology, and Instructor in Clinical Gynæcology, at the Medical Department of the University, City of New York.—It is rumored that the following changes are to take place in the teaching staff of the Kingston Medical College: Dr. Saunders to be appointed Professor of Clinical Surgery, Dr. McCammon Professor of Clinical Medicine, and Dr. W. H. Henderson Professor of Histology and Curator of the Museum.—Dr. F. D. Canfield has been appointed Assistant Surgeon to the Algoma Division of the C. P. R.

Dr. E. S. Wood, (McGill), has been appointed assistant surgeon on one of the sections of the C. P. R. British Columbia.

Dr. W. R. Sutherland has been appointed Assistant Demonstrator of Anatomy in McGill Medical College, Montreal.

MEDICAL COLLEGE FOR WOMEN.—The establishment of a Medical College for Women is about to be accomplished. The sum of ten thousand dollars has been promised toward its endowment by Dr. Jenny K. Trout of this city. This amount with whatever sums may be added, is to be vested in a Board of Trustees. Dr. Barrett's name is mentioned as the President of the Faculty. The establishment of such an institution will settle the vexed question of co-education of the sexes in medicine, in a way which cannot but be satisfactory to the medical colleges.

OBITUARIES.—Surgeon-General J. K. Barnes, U. S. A., died in Washington on the 5th ult., aged 66 years.

The death of Dr. VanBuren of New York at the age of 64 years is announced in our exchanges.

Prof. Rinecker, of Wurtzburg, has recently died at the age of 72 years.

William Farr, M.D., F.R.S., for many years compiler of abstracts in the Registrar-General's Office, London, Eng., died on the 16th ult., aged 76 years.

Prof. Von. Bruns, of Tubingen has also paid the last debt of nature.

John Brown, the Queen's faithful personal attendant, died after an illness of three days of erysipelas of the face.

BANQUET TO OLIVER WENDELL HOLMES.—The medical profession of New York has honored itself by giving a banquet in honor of Dr. Oliver Wendell Holmes, upon his retirement from active medical teaching. It was a fitting tribute to the genius of a fellow-member, and was as successful as it was appropriate. Dr. Holmes read a poem on the occasion which showed the old-time force and beauty, concluding with the following stanza :

"Deal with him as a truant, if you will,
But claim him, keep him, call him brother still."

QUEBEC HEALTH ACT.—Our sister Province has been moving in the direction of the establishment of a Board of Health somewhat similar in its provisions to the one now in force in Ontario. The Board is to be composed of three medical men, three commissioners, and a sanitary engineer. Dr. Larocque and other members of the profession in Montreal, have taken an active interest in its promotion.

REMOVALS.—Dr. R. N. Garrett, of Barriefield, has removed to Kingston, Ont.

Dr. Ecroyd of Mount Forest, Ont., has removed to Detroit, Mich. Dr. Elliott, of Iroquois, Ont., has removed to Lindsay. Dr. Bowerman of Picton, Ont., has removed to Brooklyn, N.Y. Dr. L. Sinclair has returned from Winnipeg to Walkerton, Ont. Dr. Belt, has removed from Burlington to Brussels, Ont. Dr. McAlpine has removed from Tignish to Crapaud, P.E.I.

The summer sessions in Trinity and Toronto Schools open on the 1st May with good classes.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the Board of Governors of the above-named College, will be held in Montreal on the 9th inst. The preliminary examination for admission to the study of medicine, takes place on the 3rd inst. The secretaries are, Drs. F. W. Campbell, Montreal, and A. G. Belleau, Quebec, to whom all applications should be made.

RESIGNATION OF PROF. WRIGHT.—Dr. Wright has resigned the chair of Materia Medica and Therapeutics in McGill Medical College, Montreal. He has also resigned his position on the Surgical Staff of the Montreal General Hospital. We understand there are several candidates for these vacancies.

The friends of Dr. McLean, of Ann Arbor, will be pleased to learn that he has been successful in his action for libel against the *Detroit Evening News*. He has recovered damages to the amount of \$20,000. On his return after the trial he received an ovation from the citizens of Ann Arbor, Mich.

We regret to learn that Dr. Scott, Prof. of Anatomy in McGill College, Montreal, is indisposed, and trust that the nature of his disease may not be as serious as apprehended by his physicians. He is believed to be suffering from disease of the kidneys.

Several of our city confrères will visit Europe during the coming summer. Drs. Winstanley, Ogden, and Teskey have already taken their departure, and Dr. McCollum and others are expected soon to follow.

HEALTH OFFICERS.—D. C. Allan, M.D., and W. C. Bliss, M.D., have been appointed members of the Board of Health in district No. —, County Cumberland, N.S.

CANADIANS ABROAD.—H. H. Graham, M.D., of Trinity Medical College, Toronto, has passed the primary examination of the Royal College of Surgeons, Eng.

Dr. W. Gardner, of McGill College, Montreal, has given up general practice, and will in future make a speciality of diseases of women.

CORONER.—J. A. Morse, M.D., of Ohio, has been appointed Coroner for the County of Yarmouth, N. S.

Books and Pamphlets.

UNTOWARD EFFECTS OF DRUGS. By Dr. Lewin, Docent of Materia Medica, University of Berlin. Translated from the German by J. J. Mulheron, M.D. Detroit: Geo. S. Davis.

Very few practitioners of medicine, of any long standing, can have failed occasionally, or, indeed, too frequently, to realize the unpleasant occurrence of the "*untoward effects of drugs*," and to have the painful experience that the patients and their friends rush to the conclusion that the real cause of these "effects" has been the ignorance or the negligence of the doctor, although they know very well that both in their bodily and mental constitution men and women evince very palpable peculiarities, which, in some instances, might almost tempt to the belief that nature had framed them in one of her sportive moods, or, as Shakespeare has it, that some of her "journeymen had made them, and not made them well."

No diligent student of therapeutics will, of course, be unaware of the diversity of results which should be apprehended from the action of drugs in different subjects, whether owing to difference of age, of sex, of organization, of prior morbid influences, or, finally, latent and undetected idiosyncrasy; yet, notwithstanding this general competency, he may find it very useful, and certainly very contributive to economy of his time, to find reduced into a limited space information which he otherwise might have to hunt for in numerous ponderous volumes, and even then might not discover what he required.

In this octavo of 216 pages, he will probably find, in condensed and clear form, the best of all that is known on the subject of untoward drug-action, as well as on the remedial measures best suited to its removal or suppression. Certainly, if he does not find what he seeks for, he should not hastily blame Dr. Lewin, whose medical erudition we might almost regard as a bulimic bibliomania. The list of authorities quoted by him is no less than 440. This amount of reading, in a fractional department of medical science, to any other than a German writer would be an almost unapproachable enterprise. What a blessed boon then to us to find the fruits of Dr. Lewin's patient research gathered into such limited bounds. The number of the drugs treated of by him is over 220, in which are included all the most active and valuable now in use. It is no derogation from the general merits of the work to say that the introduction, which covers 26 pages, is the best of it, and that no reader, however erudite or experienced, will rise from its perusal without being both pleased and instructed. We had marked for citation a number

of passages which appeared to us indicative of the solid practical sense of the author, but our available space forbids this indulgence.

MEDICAL DIAGNOSIS: A MANUAL OF CLINICAL METHODS. By J. Graham Brown, M.D. Edinburgh: Bell & Bradfute. Toronto: Carswell & Co.

This book treats of signs and symptoms of disease, with the view of aiding the student and practitioner in diagnosis. It contains a great deal that is valuable and which requires to be known by those at all grounded in the theory and practice of medicine. While the various causes giving rise to certain symptoms are dwelt on, yet as an aid to differential diagnosis, the work is in our estimation defective, for diseases which somewhat, or very greatly resemble, and may therefore, by the inexperienced, be mistaken for one another, might have had their respective symptoms tabulated, showing the points of similarity and of difference, and thus, in small compass, invaluable aid might have been given. Much information, and that of the latest, is found in this little book in regard to heart sounds, the cardiograph, the sphygmograph, and the physical signs found in various thoracic diseases. A very good chapter is given on skin affections, short, but giving a great deal of information in small compass. The urinary, the reproductive system, and the nervous system are also dealt with. The value of the book appears to us, to lie in the great number of points noticed, on whatever is treated of; the defect that the information given, is not so arranged, as to be used to the best advantage.

ON CERTAIN PARASITES IN THE BLOOD OF THE FROG; ALSO, ON CANADIAN FRESH-WATER POLYZOA. By William Osler, M.D., Montreal, Que.

Births, Marriages and Deaths.

In London, Eng., on the 28th of March, James F. Cattermole, M.D., to Alice Elizabeth, daughter of John Doherty, Esq., Longfield, Kent.

In this city on the 28th ult., Dr. J. A. Stevenson, of London, Ont., aged 32 years.

On the 25th ult., Joseph Allen Whyte, M.D., of Montreal, aged 40 years.

On the 24th ult., Dr. B. H. Leprohon, of Montreal, aged 68 years.

On the 12th ult., Dr. Jonathan Woolverton, of Grimsby, aged 73 years.

On the 6th ult., Dr. McIver, of Pembroke, Ont., aged 85 years.

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Original Communications.

TREATMENT OF DIPHTHERIA BY COLD WATER.*

BY A. WORTHINGTON, M.D., CLINTON, ONT.

Mr. President and Gentlemen,—The treatment of diphtheria is a subject on which there is much difference of opinion in the profession, and I may say at the outset that in many respects I have departed from the course usually pursued. The fatality of this disease is so great that any reasonable suggestion as to treatment ought not to be rejected without due consideration. Among over twenty authors whose treatment I have carefully read, no one of them (Prof. Jacobi excepted) mentions the application of cold to any part of the surface. My reason for using cold water (and ice if necessary) in the treatment of diphtheria, is that I have for 27 years used it successfully in the treatment of all forms of scarlatina, and saw no reason why it would not be equally useful in controlling the temperature in diphtheria, and I have not been disappointed. In the following cases I adopted the cold water treatment in addition to other means.

CASE 1.—I was called, on the 7th November, 1881, in great haste, to see J. M. W.—, aged upwards of three years, his father saying that he was dying with croup, and exhibited great distress. I may mention here that only two weeks before they had lost a fine boy of six years with what was supposed to be croup.

Previous history.—Has been quite healthy till within the last four or five days. Some white spots were then noticed on his tonsils, and a cold, wet cloth was applied to the throat, after which he seemed better. At noon on the day previous to my visit he was noticed to cough, and also in the

afternoon. They gave him a vapor bath, and applied cloths wrung out of hot water to his throat and chest, and repeated them till noon the next day, and gave him a decoction of bloodroot in vinegar.

Present condition.—Is very dull and takes very little notice of anything; his cough is hoarse but not croupy, and he appears exhausted. 2 p.m.—Pulse 130, temp. 102½ F., resp. 36. The soft palate and tonsils and as far down as could be seen, were covered with diphtheritic deposit, but there was not yet sufficient invasion of the larynx to interfere seriously with respiration. The breathing was that of exhaustion, but there was no dyspnoea. Prescribed ⅛ drop doses of ext. of aconite every half hour for four hours, without benefit; then changed to quinia sulph. gr. j. every two hours, and to have brandy and milk freely. Pulse came down to 116, temp. 101 F., resp. 36 and greatly laboured. The improvement was only temporary, and he died at 8 a.m. the next morning, 20 hours from the time I first saw him and 46 hours after the attack was first noticed to be serious.

The termination of this case was rapid, but I think there can be no reasonable doubt that the zymotic action of the poison was materially increased by the hot applications. Had his temperature been taken in the first of the attack, and the throat examined, and the proper treatment given by a physician, there is little doubt but he would have been saved.

CASE 2.—On the following morning, 7 a.m., while case 1 was dying, my attention was called to his brother, T. R. W., aged 10 years. Examination of the throat revealed a small diphtheritic deposit on the left tonsil. The whole arch and pharynx were much inflamed, and he was giddy on attempting to walk. Pulse 120, temp. 103 F., resp. 28. Prescribed ¼ m. fl. ext. aconite every hour, and throat to be washed with acid carbol. 1 to 60 every two hours. 2.15 p.m.—Pulse 126, temp. 104½, resp. 32. Changed the treatment to the following prescription:—

R Pot. chlor..... ʒ ij.
Syrup limonis ʒ j.
Aqua..... ʒ iij. M.

A dessert-spoonful to be given every two hours; and quinia sulph. gr. i. in same time. Abundant nourishment to be given. Tepid sponging was

*Read before the Ontario Medical Association, June, 1882.

ordered at first, but I said to his mother that the disease was gaining ground so fast that I feared a fatal result if cold water was not used to control the temperature. She at once assented, and a cold, wet cloth, large enough to cover the entire body, was wrapped around him, to be changed every half hour for a fresh one, and covered with dry flannel. A wide bread and water poultice to be put three-fourths round the neck and changed as soon as it became at all warm. 4 p.m.—Pulse 120, temp. 103 $\frac{3}{4}$, resp. 28; feels much better.

November 9th, 9.30 a.m.—Pulse 112, temp. 99 $\frac{1}{2}$, resp. 24. The patch of false membrane, which had enlarged considerably yesterday, is now nearly gone; fauces still very red; the coating on the tongue, which was thin and white, had rapidly become thick, dark and dry, but is now moist; has been sweating all night and is moist all over. 8.15 p.m.—Pulse 104, temp. 99 $\frac{3}{4}$, resp. 20. Is in every way better; throat quite clean. To continue treatment at longer intervals at discretion. Nov. 14th, was again called. 7 p.m.—Pulse 90, temp. 100. The membranous deposit began again last evening with a general increase of all the symptoms. At 3.30 a.m. to-day his mother noticed a patch of membrane, the size of a pea, which had increased by 12 m. to the size of a ten cent piece. Frequent washings with carbolic acid had taken it all away but a little on the left tonsil where the exudation first appeared. Prescribed the following:

R Pot. chlor.....5 ij.
Tr. ferri chlor.....5 ij.
Syrup simp.3 iv. M.

Dose.—A teaspoonful every four hours, and quinia sulph. gr. i. every four hours, to alternate. His convalescence from this was gradual.

CASE 3.—C. M. McG—, aged about four years. Was telegraphed for on the 15th Nov., 1881. Has been quite healthy up to the present. She is pale and has a somewhat anxious expression, and is quite hoarse when coughing or speaking. There is considerable inflammation of the fauces and pharynx, but no fibrinous deposit. Pulse 126, temp. 100 $\frac{2}{3}$, resp. 33; no lung difficulty. Prescribed the following:

R Pot. chlor.....5 ij.
Tr. ferri chlor.....3 ij.
Syrup simp.....3 iv. M.

Dose.—A teaspoonful every four hours and car-

bolic acid wash to be used every four hours alternately with the medicine.

November 19th.—Telegraphed for again; patient worse; fibrinous patches on both tonsils. 12 m.—Pulse 130, temp. 101 $\frac{3}{4}$, resp. 36. There is almost complete aphonia. To have above dose every two hours with quinia sulph. gr. $\frac{1}{2}$ in same time, alternately. New milk to be given from the first as freely as she would take it. Cold water to be applied as heretofore directed. 2.30 p.m.—Pulse 120, temp. 101 $\frac{1}{4}$. To continue same treatment. 20th, 12 m.—Pulse 112, temp. 98 $\frac{3}{4}$, resp. 22. Appearance of fauces better, and pseudo membrane nearly all disappeared. There is a possibly increased hoarseness. 3.30 p.m.—Pulse 100, temp. 98 $\frac{3}{4}$, resp. 22. Is much better, except the laryngeal trouble. Same treatment to be continued. 21st, 12 m.—Pulse 116, temp. 98 $\frac{3}{4}$, resp. 24. Passed an uncomfortable night; diphtheritic patches have disappeared; larynx more affected, but the cough is loose. 4.30 p.m.—Pulse 136, temp. 101 $\frac{1}{4}$, resp. 32. 7 p.m.—Pulse 150, temp. 102, resp. 32. Ordered thorough application of cold to throat and trunk. Continue same treatment, and to have two grs. quinine every two hours, and brandy and milk at same time. 22nd, 11 a.m.—Pulse 135, temp. 101 $\frac{3}{4}$, resp. 36. Passed a very bad night; had a high fever; was very sore and did not care to be moved; cough dry and tight, and quite a ring to it. Ordered the cold water more thoroughly applied to the throat and trunk. Lactic acid spray was commenced yesterday, a sort of hood having been formed over the patient's head to retain the spray from the steam atomizer. 10.30 p.m.—Pulse 116, temp. 99 $\frac{1}{2}$, resp. 24. Is very much better, though there is a good deal of hoarseness when sleeping. 23rd, 8.45 a.m. Pulse 120, temp. 99 $\frac{2}{3}$, resp. 30. Passed a good night, sleeping the most of the time; pseudo-membrane has appeared again on both tonsils. 9.30 p.m.—Pulse 98, temp. not taken, resp. 26. Appears better; has had no fever since morning; patches darker and mucous membranes clearing; the laryngeal trouble seems better, the hoarseness being slightly loose; the left submaxillary gland is enlarged and tender and the tissue around swollen. She is sleeping soundly, with a loose rattle in the larynx. 24th, 9.30 a.m.—Pulse 90, temp. 97 $\frac{1}{4}$, resp. 23. She has slept the most of the night. Continue quinine and change former prescription to the following:

R Pot. chlor..... ʒ ij.
 Syrup limon ʒ j.
 Aqua..... ʒ iij. M.

A teaspoonful every four hours, and the throat to be washed every hour with carbolic acid 1 to 60. Is much better and has recovered her voice. 8.30 p.m., pulse 80, temp. 96½, resp. 22. The cold water treatment has evidently been continued a little too long; had all the wet things removed and replaced with dry warm flannel. 10.40 p.m., pulse 82, temp. 96½; had bottles of hot water placed around her and hot flannels around her limbs; is sleeping very quietly and does not cough. 25th, 6 a.m., pulse 84, temp. 96½, resp. 24; directed a linseed-meal poultice with mustard on the throat. 7.30 p.m., pulse 90, temp. 96½, resp. 26; is lively and seems much better; arms and legs quite cool, body warmer. She complains of nothing. Still some pseudo-membrane to be seen; to stop the pot. chlor. and use the tr. ferri. with quinine and simple syrup; continued the brandy and nourishment freely, also the hot flannels and bottles of hot water.

26th, 1.30 p.m., pulse 86, temp. 97½, resp. 24; passed a good night, but it is still difficult for her to articulate on account of the laryngeal trouble. The diphtheritic deposit has disappeared. To continue the medicine and use the lactic acid spray again for a time. She recovered slowly from this time.

Remarks—Laryngeal diphtheria as a rule is fatal, and case three appears to have been laryngeal in character but probably not severe; the stage of incubation was at least four or five days, giving ample time for thorough blood poisoning. Of the three forms this case appears to have been "diphtheritic," (the other two forms being "croupous" and "necrotic"). A fatal termination, I think, might have been looked for with certainty but for the cold water, as on the 21st and 22nd the disease was making progress just in proportion to the non-thoroughness of its application. A crisis came somewhat unexpectedly, and the cold water was possibly continued longer than was necessary. The vocal cords are said not to be affected as a rule although the primary breeding place of this and other gerin diseases, but not necessarily more serious though requiring much more time for convalescence.

Conclusions.—1st. The treatment of diphtheria must be begun with the invasion of the disease to secure any safety to the patient—not a moment's time should be lost. 2nd. The cold water applications should be made on the first appearance of a rise in temperature, and its continuance governed by the tendency of the extremities to become cool. 3rd. The most careful attention should be given to the nourishing of the patient from the first. 4th. Adynamic symptoms should be anticipated by the free use of stimulants and tonics, and the application of artificial heat if necessary.

THE DISEASE OF A DISEASE.

BY EDWARD PLAYTER, M.D., TORONTO.

The belief is maintained by many observers that almost all, if not all diseases, excepting those of a traumatic character or arising from violence, are caused either by want of some one or more of the normal essential ingredients or nutrient elements of the blood, or the presence in the circulating fluids of some substance or substances of an abnormal or extraneous character. In theory it seems plausible, and in practice we are called upon to treat nearly all diseases upon one or other of these propositions. By far the larger proportion of diseases, and indeed nearly all those of a serious or malignant character, arise from the last-named condition—that of foreign, more or less poisonous, matters in the system, and most of these matters, we have now good reason to believe, are living organisms. The parasitic nature of the various "fevers" is almost universally acknowledged, and it seems not improbable that many morbid processes now regarded as true inflammations, may yet be found to have a parasitic origin, or to have their starting-point in some form of obstruction by foreign matter.

With a view to more successful treatment—prevention and cure,—of disease, investigators are laboring toward determining the relations of such foreign matters, especially living organisms, to pathological processes and conditions, and herein is a large field for investigation. We now have a fair knowledge of the way in which some of the parasites produce disease. The *tænia* do so by consuming nutritive matter which ought to go to the sustenance of the body; and such as the *echi-*

nococcus, it appears, simply by their presence in such delicate organs as the eye and the heart. The trichinæ create general irritation and a febrile condition by their migrations from the intestines to the muscles and in the muscles. In the case of the microscopic parasites of the septic process, it is probable that the oxidation which is essential to the processes of their growth and multiplication, and the consequent heat thereby developed in the body, gives rise to the fever and intestinal irritation with which their presence in the body is accompanied. Regarding the peculiar way in which the more specific organisms of such constitutional diseases as tuberculosis, syphilis and leprosy produce the morbid processes associated with them, we know but little.

In referring to investigations such as above mentioned, the *Medical Times and Gazette* (London), intimates that in such attempts there has been probably far too little disposition to take advantage of well ascertained facts respecting the life, history and mode of pathological action of the larger animal parasites, and the analogy of these promises now to supply a valuable link in tracing the relation of organisms to disease. During the last few years, Dr. Patrick Manson has been making investigations into the filaria disease and several of his articles on it have been published in the *China Customs Gazette* and re-published in the *Medical Times and Gazette*. He has shown that "there could be no reasonable doubt that the *filaria sanguinis hominis* was associated with certain 'lymph diseases', such as chyluria, lymph-scrotum, and other forms of elephantiasis; but it was equally certain that in the majority of instances of filaria disease no lymph disease was to be found." In the words of Dr. Manson, "there is abundant evidence that *filaria sanguinis hominis* does not always, or even generally, give rise to disease. As a rule, parasite and host live together for years in perfect harmony."

It has been shown by Dr. Manson, in papers published during the last few years in the *Medical Times and Gazette*, that the *filaria sanguinis hominis* which infests the blood is the embryo form of a parent worm, 250 times larger, which inhabits the lymphatic vessels; and in every instance of filaria in the blood there must be a parent filaria in some part of the lymphatic system. But evidence of the presence of the parent, in the form of

lymph disease, is the exception and not the rule. It follows, therefore, that it is only in special conditions that the parent gives rise to chyluria or elephantiasis. What are these conditions? "What is the link between the mature parasite and elephantiasis? How comes it that in but one subject out of many, serious disease is the result of the presence of such a tenant?" Dr. Manson has shown that it is because the parent worm, whilst naturally viviparous, occasionally aborts, and that the ova give rise to the lymph disease. He has now found two cases in which abortion had occurred, and refers to them as follows:

"Here, then, are two cases in which the ova of the parasite were found in the lymphatics. It is evident that my first case was not exceptional. Occasionally, ova are passed into the lymphatics. Like other animals, therefore, the parent filaria is liable to miscarry. This, at first sight, would appear to be a matter of little importance, but reflection will show that this is by no means the case. The accident is fraught with danger, and is, in fact, the cause of the elephantoid diseases, and the key to their intimate pathology.

"In the instances in which the parent worm has been discovered, she was found in lymphatic vessels on the distal side of the glands. This has been shown to be in many, if not in all, cases her normal habitat. Her progeny, therefore, must travel along the afferent vessels, through the glands, and so on to the thoracic duct, and thence into the blood. The long, sinuous, and powerful body of the embryo is well adapted to perform this journey. But suppose, instead of this mature embryo, an ovum is launched into the lymph-stream prematurely, and before the contained embryo has sufficiently extended its chorion, then this passive ovum must certainly be arrested at the first lymphatic gland to which it is carried by the advancing lymph-current. It measures $\frac{7}{100}$ " \times $\frac{1}{100}$ ", whereas the outstretched embryo is only about $\frac{3}{100}$ " in diameter. It is much too large to pass the glands; and the embryo, rolled up in its chorionic envelope, cannot aid itself. It becomes, in fact, an embolus. Now, filariæ are prodigiously prolific. Myriads of young are expelled in a very short time. I have watched the process of parturition in the minute *filaria corvi torquati*. Every few seconds a peristaltic contraction, beginning low down in the uterine horns and extending to the vagina, expels

some twenty or thirty embryos. If this process of parturition occurs prematurely, or peristalsis is too vigorous, and extends to a point high up in the uterine horns where the embryo has not yet completely stretched its chorional envelope, then ova are expelled. These, as they reach the glands, where the afferent lymphatic breaks up into fine capillary vessels, act as emboli, and plug up the lymph-channels one after another until the fluid that carries them can no longer pass. In this way the gland or glands directly connected with the lymphatic in which the aborting female is lodged, are thoroughly obstructed. Anastomoses for a time will aid the passage of lymph, but the anastomosing vessels will carry the embolic ova as well as the lymph. The corresponding glands will then, in their turn, be invaded, and so on until the entire lymphatic system connected directly or indirectly with the vessel in which the parent worm is lodged becomes obstructed.

"This, I believe, is the true pathology of the elephantoid diseases:—1st, parent filaria in a distal lymphatic; 2nd, premature expulsion of ova; 3rd, embolism of lymphatic glands by ova; 4th, stasis of lymph; 5th, regurgitation of lymph and partial compensation by anastomoses; 6th, renewed or continued premature expulsion of ova; 7th, further embolism of glands. This process, according to the part of the lymphatic system it occurs in, the frequency of its recurrence, and its completeness, explains every variety of elephantoid disease.

"It may be objected that I have assumed too much in supposing that the parent worm is liable to miscarry. But I have sufficient evidence in the two cases I have narrated that it has occurred; and if it has happened twice in a limited number of cases, it certainly happens not unfrequently. Perhaps I have examined lymph from scrotum, glands, or urine in 200 cases; yet in this limited number of observations evidence of premature birth of ova was obtained twice. Therefore, the thing cannot be of very rare occurrence, although to have sampled the lymph at the proper time, and in a suitable case, must be regarded as a fortunate circumstance not often to be encountered."

There is, then, at least one disease in man caused by the disease of a parasite in his body.

CINCHONA deposits may be readily cleaned from bottles by using aqua ammonia.

PRIMARY PNEUMONIA AS A COMPLICATION OF SEPTICÆMIA.

BY H. MCNAUGHTON, M.D., ERIN, ONT.

Mrs. R., æt. 30, the mother of five children, had an attack of articular rheumatism about five years ago. Since that time she has suffered a good deal from soreness and swelling of the wrist-joints and fingers, but there does not appear to be any organic affection of the heart.

About the end of January last, when within about six weeks of her expected confinement, she had a sudden attack of uterine hæmorrhage; fourteen days afterwards it returned with increased profusion. On my arrival, the dilatation was sufficient to enable me to rupture the membranes. The pains came on promptly, and in a short time she was delivered of a dead fœtus. On the ninth day her pulse was 90, there was nothing abnormal and beyond a slight tenderness in her breasts, she felt as she expressed it, "very well"

On the twentieth day she complained of an intense pain in the right middle finger; on the following morning it was much increased and the finger was greatly swollen. On making an incision, a considerable quantity of matter escaped and she experienced some relief. The next morning, the swelling had extended to the neighboring fingers and the palm of the hand. There was a red streak up the arm and tenderness in the axillary space; at the same time the left foot began to swell and was very painful. The pulse was 130; respirations 45 per minute. She had a short cough and complained of a sharp pain in her right side. There was rusty-colored expectoration and the usual physical signs of engorgement of the posterior and lower portion of the right lung. On making incisions in the hand and dorsum of the foot, a free discharge of matter took place.

Three days after the trouble began in the fingers, the cough grew loose and there was less difficulty of breathing. She continued to improve from this time.

The discharge from the incisions continued for about four weeks. The pain and swelling which troubled her so much previous to her recent illness have nearly disappeared and she has regained the use of her joints to a corresponding extent. Can it be that the pneumonia was due to a septic condition of the blood, as a result of the puerperal

state? Such a complication invariably terminates in death. The recovery of the patient renders the existence of a secondary pneumonia extremely improbable.

During the first night of her suffering from the finger, she was exposed to a current of cold air and was frequently in and out of bed. The probability is that the affection of the lung developed under the same influence that produces what we commonly call a "cold,"—that it ran its course concurrently with the septic trouble which was due to the puerperal state.

The treatment consisted in the application of warm poultices to the chest and affected parts and the free use of quinine, muriated tincture of iron and chlorate of potash.

Correspondence.

PROVINCIAL TARIFF OF FEES.

To the Editor of the CANADA LANCET.

SIR,—I would like to suggest that at the coming meeting of the Ontario Medical Association there be some discussion and settlement of the vexed question of "Tariff of Fees." The profession should in this Province adopt a tariff which might be published with the proceedings of the meeting in the newspapers, and in this way be brought before the public. There is now a gross irregularity in some sections in reference to the fees charged for professional services. In one city which I shall not mention, one medical man charges one dollar per visit in town, while a few steps further on another medico charges fifty cents per visit. Both men write M. R. C. S., Eng., after their names. The charge for visits in the country also demand attention, and should be fixed by some established tariff.

The Ontario Medical Association will deserve the thanks of the profession and the public if this matter is settled at the coming meeting. I would suggest that this subject occupy the earnest attention of the Association, and that the medical men of this Province turn out in large numbers to show their interest in having a permanent tariff of fees established for the whole Province.

Very sincerely yours,

PROTECTION.

UNPROFESSIONAL.

To the Editor of the CANADA LANCET.

SIR,—As I have always noticed, the "CANADA LANCET" endeavours to elevate the status of our profession and to chastise irregularities, and as we have medical men here needing notice for their delinquencies, I wish to briefly call your attention to the following:—

Dr. ——— wishes to announce to the public that hereafter he will make 25 per cent. discount on his already low charges, and adopt the three months system of settling his books, thereby relieving those who are willing to pay their bills promptly, from making up for the loss accruing out of the long standing bills and bad debts of others.—Amherst, N. S.

His practice is to charge fully up to or beyond our tariff in cases where he can get the opportunity, but "his already low charges" are just exactly 50% less than the tariff, and now he proposes another 25% discount. This he does to secure the office of medical attendant of the township, and also of Working Men's Unions, etc., etc.

Yours truly,

M. D.

May 3rd, 1883.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

SANITARY CONVENTION AT REED CITY, MICH.

(Reported for the CANADA LANCET.)

The convention was held April 26 and 27, 1883, and was a very successful one, being fairly attended by the citizens of the place, by health officers of townships, cities and villages in the surrounding counties, and by sanitarians from other parts of the State.

After introductory remarks by the President, of the convention, Rev. J. W. Hallenbeck, and an address of welcome by Mr. W. M. Slosson, of Reed city, and a statement of the purposes of the convention by Hon. John Avery, M.D., president of the State Board of Health, a paper was read by H. D. Bartholomew, C.E., city engineer of Lansing, Mich., on "Drainage and Sewerage," in which he stated the principles which should govern the laying-out and construction of drains, the principles which should govern the construction of sewers,

calling attention to the different requirements in the two cases, drains requiring ready entrance of water throughout the entire system, while sewers should be watertight at all places except at entrances and exits provided. He spoke of the rules to be observed in calculating the size where it was attempted to make one set of conduits fulfil both these requirements, and pointed out the advantages of the separate system under certain circumstances where applicable. He then made special recommendations for the conditions at Reed city.

Dr. E. S. Richardson, of Reed city, the secretary of the convention, in his paper on the water-supply of Reed city, showed diagrams illustrating the subject. The first was a profile of the Flint and Pere Marquette Railway from Ludington to Midland, showing that the water-supply of Reed city must come largely from the rainfall on the circumscribed area west of Reed city. Another diagram exhibited a section of the earth down to the level of the bottom of the wells from the dépôt to the cemetery, the latter being on the highest ground, and the soil being sandy. Extraordinary precautions will need to be taken to prevent the leaching down from the cemetery and privy-vaults in the town, to the water-supply beneath. Out of a large number of wells examined in the place, he had found but two contaminated, and samples of the water from them were exhibited, illustrating the evidence of sewage-contamination; he also showed a sample of water from a well outside of town, on premises where there are cases of typhoid fever, and one recent fatal case; the water was very foul, as might be anticipated from the position of the well, between the house and the barn, which are on banks of clay, reaching into a stratum of sand which has no continuous protecting layer of clay over it and receives the washings from the barn.

Mr. O. P. Dewey, of Reed city, presented the subject of the mischief done to public health by means of patent medicines and quack doctors.

F. J. Groner, M.D., of Big Rapids, gave a very interesting and able resumé of the present literature of the subject of germs in disease, including a list of a large number of diseases now known or believed to be caused by their own specific germs. Incidentally, he referred to several grounds for hope that, in the near future, several of these diseases might be favorably modified by means similar to that by which small-pox is modified by vaccination.

Hon. John Avery, M.D., president of the Board, read a paper on house ventilation.

C. H. White, M.D., of Reed city, gave a concise history of diphtheria, and a short account of what is now known of that disease. In the discussion which followed, Henry B. Baker, M.D., secretary of the State Board of Health, presented a short paper, entitled, "Epidemic-waves of Diphtheria," showing that the disease tends to recur in a community at comparatively regular periods, and that this period seems to be shorter in cities than in sparsely settled countries. The evidence seemed to indicate that diphtheria was usually spread from person to person, and from country to country. Dr. Richardson mentioned cases illustrating the great contagiousness of the disease, and the general tendency of the discussion was in the same direction, and at the close of the discussion the document issued by the State Board of Health, on the restriction and prevention of diphtheria, was distributed to the audience. Several other papers of interest were read and discussed, after which the convention closed.

ONTARIO BOARD OF HEALTH.

The Provincial Board of Health met again on the 10th ult, Dr. Oldright in the chair. Present: Prof. Galbraith, Drs. Covernton, Yeomans, Cassidy, Rae, and Bryce. The chairman delivered his annual address, which consisted of a retrospect of the past year, and also a consideration of the prospective work of the board. He advocated the appointment by the Municipal Council of every city, town, incorporated village, and township of a local board of health, which in turn shall appoint a health officer for the municipality, or for several adjoining municipalities, should it be necessary for the purpose of avoiding expense or for other reasons.

He also referred to the restriction and prevention of contagious and infectious diseases, the neglect of the act requiring notification of infectious diseases, and the misconception regarding the object of the clause, many supposing the object to be the removal of the infected person, instead of its being in the vast majority of instances for the purpose of securing a sufficient separation of the infected from those who would otherwise be likely to become so.

Again, some medical practitioners object to the manner in which certain health authorities have

provided for the notification of cases of infectious disease by an open post-card. With a few another reason exists in false notions regarding the demands of professional confidence. The legal practitioner is most scrupulous in reference to this point; he regards as sacred any knowledge that he may possess regarding the actions of his client who has committed a homicide; but even *he* does not consider it any part of his duty to connive at the continuance of the careless acts of a client by which the lives of others are endangered. Neither is it any part of the duty of a medical practitioner to connive at the disregard of his patient as to whether he sends the seeds of death and disease amongst his neighbour's or it may be his customer's children.

He further alluded to the outbreak of small-pox in Shuniah, Lake Superior, and the rapidity with which it was stamped out by the energetic action of Sheriff Clark, M.D., health officer, Drs. Smellie and McCammon.

Dr. Cassidy read the report of the Committee appointed to consider the desirability of having instruction in hygiene regularly imparted in schools, the general conclusions of which were: That greater prominence should be given in Public and High Schools to the study of hygiene, and that to accomplish this end in the most expeditious and satisfactory way, physiology and hygiene should be made a compulsory subject for the fourth class in public schools and for Intermediate examination. The report was adopted.

The Board then discussed, in an informal manner, the question of epidemics, and the duties of health officers in such exigencies.

Dr. Canniff gave his opinion as to the *modus operandi* to be followed in such cases, and believed that every victim of small-pox should at once be conveyed to the small-pox hospital, and that persons down with the scarlet fever should be properly isolated. He also dwelt upon the necessity of disinfectants.

Dr. Covernton held the same views. As to disinfection, he contended that the process should be carried on entirely under the supervision of a duly qualified officer, who would see that the matter was properly done.

Prof. Galbraith read the report of the Committee appointed by the Board, and composed of himself and Dr. Oldright, on the disposal of sewage. The report recommended the advisability of abolishing

the privy-pit by law, and after referring to the various methods of disposal of solid excrement, viz.: the water-works system, the Hull ash-closet system, the dry earth system, and the Rochdale pail system, concluded with a recommendation of the ashes or earth system, on account of their deodorizing properties and the freedom from putrefactive decomposition. The report was adopted.

On motion of Dr. Cassidy, seconded by Dr. Yeomans, it was resolved to forward a circular to all the municipalities in the Province, containing a number of questions regarding the health of the population and other matters.

Dr. Yeomans was appointed to watch legislation in connection with the Board, and Drs. Oldright, Cassidy, and Prof. Galbraith to be the publication committee.

Selected Articles.

DIABETES MELLITUS.—TYSON.

The patient whom I show you is 70 years of age, a tailor, who was admitted to the hospital August 31, 1882. According to his own account, he always had fair health until three years ago, when he noticed that he was passing more urine than usual, and was continually thirsty. At the same time he was annoyed by a dryness of his throat and mouth.

It was with these symptoms that he was admitted to the hospital, and they at once suggested an examination of his urine, which was found to contain sugar. Our first note is dated September 7th, when he passed 96 ounces with a specific gravity of 1032, and the next day he passed 112 ounces, having the same specific gravity. The first quantitative analysis was made on the 10th, when the urine was found to contain 21 grains to the fluid ounce. I apply the tests in your presence, and you notice both the Fehling's copper test and Bötger's bismuth test respond promptly, the former precipitating the red cupric sub-oxide, and the latter black metallic bismuth.

You will find in the books, in addition to those named, quite a long category of symptoms, which are at times found associated with saccharine diabetes, but those we note in our patient, viz., dryness of the mucous membranes, unusual thirst, and the passing of an increased quantity of urine of high specific gravity, and containing sugar, are, after all, those essential to a diagnosis. A frequent mode of termination of the disease is by tubercular phthisis, when, of course, are super-added the symptoms incidental to it. Among others, is an annoying itching about the *meatus*

urinarius, caused by the constant passage of the sugar-charged urine over it, and in females this sometimes extends to surrounding parts, producing a distressing *pruritus vulvæ*. Emaciation, great muscular weakness, and the loss of sexual inclination are symptoms incident to the mal assimilation of ingested food, which, though taken sometimes in more than sufficient quantities, fails to serve its purpose.

Without delaying further, therefore, to discuss the less essential symptoms of the disease so evidently present, let us ask ourselves the question, what is diabetes mellitus? It is scarcely necessary for me to say to you that it is not a disease of the urinary organs. Its study has naturally fallen into the hands of those interested in these diseases, because it requires for its recognition a study of the urine. But the kidneys are simply the organs which eliminate the sugar from the blood, which is there in undue quantity. Glycosuria, or saccharine urine, implies glycæmia, or saccharine blood. If there is no sugar in the blood, there can be none in the urine.

A certain relation of the nervous system to glycosuria has been known to exist since Bernard's discovery that puncture of the floor of the fourth ventricle produced it. Since then it has been found to succeed upon section of the medulla oblongata, the optic thalami, and great crura cerebri; by destructive lesions of the pons, and middle and posterior crura cerebelli; section of the spinal cord above the second dorsal vertebra; by section of filaments of the sympathetic nerve ascending from the first thoracic ganglion to accompany the vertebral artery; by removal or injury of the superior cervical ganglion; and sometimes, but not always, after section of the sympathetic in the thorax; and even after section of the nerve trunks of the limbs, as the sciatic.

With such glycosuria is invariably associated an active hyperæmia of the liver. It must be remembered, also, that an important function of the liver is the formation of the so-called glycogen or animal starch from the starchy and saccharine articles of food, and to a slight extent from albuminous food. Thus produced, it is stored in the liver, but re-converted into sugar and passed into the blood in such quantities as are demanded by the organism, for oxidation. Remembering this function of the liver, there are two ways in which an excess of sugar may get into the blood. Either the grape sugar, formed by the digestion of sugar and starches, may pass too rapidly through the hyperæmic liver to permit its conversion into glycogen, or having undergone this conversion, it is too rapidly re-converted into grape sugar to be oxidized. The blood soon acquires an excess of glucose, and the latter then appears in the urine. It has been ascertained by experiment that when the amount of glucose in the blood exceeds one-

quarter of one per cent. it makes its appearance in the urine.

But in whichever of these ways the result is produced, the hyperæmia of the liver is always present. Hence it follows that whatever will produce such hyperæmia may produce diabetes, whether it operate through the nerve centres or not. Two cases of diabetes have come under my notice in which the symptoms were preceded by biliary colic and passage of gall-stones. The one has disappeared under treatment, the other remains uncured. Artificial irritation of the liver by needles and galvanic currents has also produced glycosuria. While injuries and diseases of the nervous system are often accompanied by glycosuria, there are many cases in which it is impossible to discover any relation between the two conditions, and not all cases of diabetes, nor even a majority, dare be considered diseases of the nervous system. It is not unlikely that sometimes the hyperæmia of the liver is a reflex one, being caused by irritative influences operating through the pneumogastric nerve (which is the sensory, and not the motor, nerve of the sugar-forming process) upon the diabetic centre, and thence through the vaso-motor nerves in the spinal cord and sympathetic upon the blood-vessels of the liver. Among these reflex relations must be placed derangements of digestion, which, acting upon the end filaments of the pneumogastric, produce the requisite irritation and its reflex results. It must be admitted, however, that there are still many difficulties in the way of explaining the phenomena of diabetes mellitus. Thus, admitting that a certain number of cases, which cannot be due to central nervous lesions or disease, are the result of reflex irritation, how are we to account for the continuation of the symptoms after the irritation has apparently disappeared? Can it be that the liver, once thrown into the hyperæmic state, by reason of a sort of inertia, cannot return to its natural condition while such articles of food are given as stimulate its glycogenic function?

In autopsies, alterations in the liver, both of a gross and microscopic character, are sufficiently frequent to make it reasonable that temporary or permanent changes in this organ are at the bottom of a large number of cases of diabetes. These changes are chiefly of size, color, and consistence. The liver is darker and harder, and, while sometimes it is only slightly enlarged, at others it is three times as large as in health. For the more minute changes I must refer you to the books. But it cannot be denied that these changes may be the result of hyperæmia also. Diabetes has been associated, not infrequently, with pancreatic disease.

It is not impossible also that a transient glycosuria—it should scarcely be called saccharine diabetes—may result from an over-ingestion of

sugar-forming substances. Any one may produce on himself a glycosuria by the too free consumption of saccharine and amylaceous foods.

Whatever may be the difficulties in the way of explaining the phenomena of diabetes from the standpoint of digestive derangement, that some such relation exists is shown by the result of *treatment*. For by far the most frequently successful plan of treatment is that which excludes saccharine and farinaceous articles from the diet. It occasionally happens that this fails to relieve the symptoms, and when this is the case we may infer that some serious lesion of the nervous system is at the bottom, or more likely, perhaps, that the liver has become secondarily so much altered that it cannot resume its functions, and that now even albuminous foods are being converted into sugar. Of the selected food, that which gives the most satisfactory results is a diet of *pure skimmed milk*, or buttermilk. Our patient has been carefully tested on this system of diet. On referring to the notes, I discover that on October 30th he was passing 56 ounces of urine, of a specific gravity of 1029, and containing 18 grains of sugar per fluid-ounce. On the day before this he passed 76 ounces, specific gravity 1038, and containing 23 grains of sugar to the fluid ounce. On the 30th day he was placed entirely upon a milk diet, and we had an immediate diminution in the amount of sugar passed. On November 1st, there were only 10 grains of sugar per ounce; the amount of urine passed in 24 hours still remained at 56 ounces. Replacing him upon a mixed diet, immediately the quantity of urine and the proportion of sugar rose, to be again reduced on restoring the skim-milk diet.

It is found sometimes that a patient is not able to bear a milk diet, although this occurs less frequently than might be supposed. Pure skimmed milk is to be preferred, chiefly because of its easier assimilation. Some observers, of whom Dr. Donkin is the chief exponent, claim that the skimmed milk has a special curative action, but I cannot see any reason for this. All that is removed from it by skimming is the fat, and fat is not converted into sugar in the liver. It is most interesting to observe that under the use of large quantities of milk how much less urine is passed than fluid ingested. The body weight can easily be maintained on a milk diet, although it is impossible to lay down a rule as to absolute quantity required. I have known the weight to be maintained by two quarts per day, and I have known five and seven a day to be necessary. The milk is best administered at stated intervals and in fixed quantities. I always begin with eight ounces (an ordinary tumblerful) every two hours, increasing as required.

If a milk diet cannot be borne, a restricted diet can be obtained, which is better than a mixed diet. A purely albuminous diet is almost unendurable for any length of time, but there are certain vege-

tables which contain but a small amount of sugar-producing substance which may be added to meat. Such are the "green" vegetables, including spinach, cabbage, tops of celery, green peas, beans, etc., as well as the acid fruits, and, by a diet such as this, the most surprising results may be obtained. It appears that the vegetable sugars, as those found in berries, are more easily assimilated than cane sugar. Even where a skim-milk diet is well borne, my practice, after the sugar has disappeared, is to gradually add other articles, in the shape of oysters, game, and green vegetables, watching the urine for any return of the sugar; and it is always important to keep a case under observation for some time after sugar has disappeared from the urine.

An article of food which is much missed by some is *bread*, and it is scarcely necessary to say that it is one of the most objectionable, because of the large amount of starch it contains. And I regret to say that I have not found gluten bread a satisfactory substitute. A recent experience will illustrate. I have now under my care, a lady who had been for nine months under treatment for diabetes before I saw her, but in whose case the pure skimmed milk had never been tried. She had finally, in despair of recovery, been allowed to take anything she wanted, and when I first saw her, was drinking a quart of champagne daily to quench her thirst. It is needless to say this was discontinued, and she was put upon a pure skim-milk diet, and an unlimited amount of Apollinaris water. In ten days the sugar had disappeared, and shortly thereafter I permitted the gradual addition of other articles of diet, including green vegetables. All went well until she asked to be allowed to take some gluten bread, which I permitted. In three days I examined the urine, and sugar was again present. The gluten bread was discontinued, and in three days the sugar had disappeared. The resumption of gluten bread was followed by the return of sugar, and its withdrawal by the disappearance of the sugar. Such an experiment is, I think, conclusive. Of course, it is not claimed by the makers of gluten flour, that it is completely free from starch, but as it is already a rather uninviting food in its present state, the inference is, that when it is entirely freed of starch, the bread made from it will be scarcely tolerable. At the same time it must be admitted that the gluten bread contains less starch than the ordinary wheaten bread, and there may be cases in which the starch of the former is assimilated, when the quantity in the latter could not be. The same may be said of the so-called "bran-bread," made of unbolted flour. With other substitutes for wheaten flour, as the almond flour of Pavy, bran flour, inulin, etc., I have had no experience.

Are drugs of any use in the treatment of diabetes? I believe they are, although if compelled

to rely upon drugs or diet alone, I should prefer diet. The most efficient remedy is probably *codeia*, although I am almost afraid to say this, for a few months ago I should have given the palm to *ergot*, and until recently I have always used it first. The use of *ergot* is based upon scientific principles, since it is well determined that it exerts a contractile influence upon the walls of bloodvessels, thus counteracting hyperæmia. I have frequently used it, and have no doubt whatever of its efficiency. The best preparation is the fluid extract, which is given in doses of from twenty drops to a fluid-drachm four times a day. *Codeia* is not a new remedy in this disease, having been suggested by Dr. Pavy fifteen years ago. We have found marked results from its use in the case before us. The plan I usually adopt is to begin with half a grain three times a day, gradually increasing the dose, watching its soporific effects, as well as that upon the pupil. I have given patients in this house as high as ten grains a day, and fifteen grains a day have been given. In this patient, after giving one and one-half grains a day for a few days, we were struck with the smallness of the pupil, but on discontinuing its use for a short time, we discovered that the patient naturally had a very small pupil.

You may ask, have you ever cured a case with *codeia*? I cannot say I have; possibly, perhaps, because I should be afraid to rely solely upon it, or any other one drug. But such cases of recovery are reported. As is the case with all diseases difficult to cure, there is in addition to those named, a long list which have been put forth as cures. *Bromide of potassium*, also an old remedy, has recently been again brought forward by the French school as peculiarly efficient. I can easily understand how, in a certain class of cases, it would be of value, as those due to hyperæmia of the brain, cases which may be characterized as nervous. We know that emotional causes are often at the bottom of diabetes. Both mental anxiety and physical fatigue have been known to produce the disease, and when purely emotional causes have operated, the bromides may be beneficial, but I have never found them so.

Within the last few days the medical journals have published the treatment of Dr. Clemens, of Frankfort-on-the-Main, by a solution of what he calls *brom-arsen*, which is probably a bromide of arsenic. Dr. Clemens bestows the most extravagant praises upon the remedy; so extravagant, indeed, that I mistrust it, although arsenic itself has long had a reputation in the treatment of diabetes, and not without reason. I shall, however, make an early test of it. He makes it by adding bromine and arsenious acid to glycerine and water, in such proportions that one drop represents $\frac{1}{16}$ th grain* of bromide of arsenic. Clemens recom-

mends it to be given, along with a selected diet, beginning with one drop three times a day, and gradually increasing until eight or ten drops are given per day. He gives it in a given quantity until it ceases to have an effect, and then he increases it, one drop at a dose, until, as he claims, the disease is cured. He also recommends the use of the *constant current* from 20 to 24 cells, one pole being placed at the nape of the neck and the other over the liver. This has been recommended by other German therapeutists. I believe I have tried most of the other numerous remedies recommended in the books for diabetes, but have found them valueless as to specific effects.

Certain it is that we must make different classes of cases of diabetes, and we should never begin treatment until we have as nearly as possible classified our case in accordance with its course. There are cases which can be easily cured by a selected diet; others in whom, while a cure is apparently impossible, the disease may still be kept in abeyance for years, and the patient is practically well. Others again have had sugar in their urine for many years, and seemed not to be seriously affected by it. These are generally stout persons and past middle life. Clemens says, in the article referred to, that the disease in thin, spare persons is generally due to some nervous lesion, and in stout persons to defective assimilation, and in this he is not far wrong. In other cases still, all treatment seems unavailing. The amount of sugar passed may be reduced by treatment, but the patient does not gain any strength. But I believe there are comparatively few cases which, if discovered sufficiently early, are not amenable to treatment. The disease is occasionally overlooked until it has existed for some time. It is well known that it is very much more serious in young persons—say under 20 years of age—than in adults. Yet within the past two years I have known a young girl of 12 years under the care of one of my professional friends recover completely.

Diabetic persons should be careful about permitting any surgical operation. One of the terminations of the disease is gangrene, to which there

theary, corner of Broad and Spruce Streets, Philadelphia, has prepared for me a solution of bromide of arsenic, in the following manner: 77 grains of metallic arsenic in powder are added in small portions to 240 grains of bromine, the latter being placed in a long test tube immersed in ice-water to prevent too rapid reaction, which is very violent. One hundred grains of the terbromide thus obtained are then dissolved in sufficient distilled water to make ten fluid-ounces. One minim will then contain one forty-eighth of a grain.

Since the above lecture was delivered, I have tried the remedy in two cases, both using an unselected diet. In the one case it could not be borne on account of an obstinate diarrhoea. In the second there appeared to be no effect on the quantity of sugar or urine, but the patient has gained a pound a week in weight for three weeks. The quantity reached was 8 drops a day, or $\frac{1}{8}$ th grain.

* Mr. R. F. Fairthorne, with Mr. James T. Shinn, apo-

is a peculiar tendency, and any operation is apt to be followed by gangrene. A year ago a diabetic under my care in this house was blistered upon the foot, and serious sloughing followed.

Cataract is not an infrequent complication, but the operation is not to be recommended for the reasons above given.—*Med. News.*

GASTRIC CANCER.—TYSON.

Before making a personal examination of this patient, I wish to call your attention to her extremely cachectic appearance. This is seen not only in the pallor of her face, but also in the almost bloodless condition of her lips. The little bloodvessels, which, seen through the transparent mucous membrane, give the red color to the lips, are either almost empty, or filled with blood which is deficient in red corpuscles.

As to her history, she is 40 years of age; is married; her husband living; she has had two children. Three years ago a hard lump appeared at the left angle of the mouth. This gradually ulcerated, and was removed two years ago by Dr. Wilson, at the Woman's Hospital. The growth, she tells us, was pronounced a cancer. The scar left by its removal is still visible, but there has been no re-appearance of the disease *in loco*. Before the operation there had been a gradual failure of strength and weight, and instead of her general condition improving after the removal of the tumor, it seemed rather to continue to fail.

She was admitted to the hospital September 15, 1882. At that time she complained of dyspepsia. The indigestion was characterized by acidity and the disposition to discharge acid fluid. This was the only trouble complained of. The efforts to counteract this acidity by the ordinary alkaline mixtures were but partially successful, and it was only by the use of large quantities of lime-water and other alkalies, and the final adoption of a pure-milk and lime-water diet, that this acidity was relieved sufficiently to secure her tolerable comfort, and at present she does not suffer much from this symptom. There soon supervened upon this condition a tendency to nausea, and a disposition to vomit. In this vomiting there was not, nor has there been since, anything like regularity, nor a fixed relation to the meals. Large quantities have never been vomited, and this has never been a troublesome symptom. The matters discharged were usually an acid fluid and partially digested food; occasionally, however, she vomited matters different from those described, and to these I shall refer in a few moments. There has always been some constipation, not obstinate constipation, for the bowels are easily relieved by ordinary aperient remedies.

As to the second kind of vomited matters, she

tells us that they consist of a substance resembling coffee grounds. She says that last night, for instance, she vomited a teacupful of this brown substance, which, in her own language, looked like the sediment which remains in the cup after the coffee has been drained off. This description is spontaneous, and, although we have never seen the substance, I do not think we dare doubt its nature. It is altered blood. The vomiting of this occurs at very irregular intervals, sometimes every week, and sometimes only once a month. She says that this peculiar vomiting occurred even before she came to the hospital. This, then, is her history so far as subjective symptoms are concerned.

On her admission we were impressed by her extreme pallor, and therefore frequently examined the abdomen for a tumor. She was also carefully examined for uterine cancer, but none was found, and there is no other disease of the womb. In the absence of anything distinctive in the symptoms, leukæmia suggested itself, and I had the blood examined by Dr. William E. Hughes, who reports that he found in a cubic millimetre of blood 1,999,000 red corpuscles, and 15,000 white corpuscles—one white to about 133 red. The red corpuscles were also small, but the disproportion between the two kinds was not considered sufficient to justify a diagnosis of leukæmia.

About the middle of November the looked-for aid to diagnosis presented itself—a tumor. This is now much more distinct than it was then. Even at a considerable distance you can see an elevation of the triangular space included between the lower border of the ribs and a line drawn from the angle of this border on the right side, through the umbilicus almost to the superior spinous process of the ilium on the left. In addition to this diffuse swelling there is a distinct tumor, nearly circular in outline and about two and a half inches in diameter, just to the left of the umbilicus; that is, a line drawn vertically through the umbilicus bounds the right edge of the tumor as a tangent does a circle, the mass of the tumor being to the left. I should have stated earlier that soon after admission, that is, about October 1st, there was not only tenderness in this region, but she also complained of pain independent of pressure, although no tumor was detected until a month later.

Let me briefly recapitulate the symptoms:

An intensely anæmic woman has suffered for some time from gastric symptoms, these symptoms being almost constant acid dyspepsia and a disposition to vomit, the vomiting occurring at irregular intervals and with no definite relation to the meals. Occasionally there has been vomiting of altered blood. There is a circumscribed tumor to the left of the umbilicus. The question as to what is the matter, is immediately answered by the suspicion, that it is a case of cancer in the stomach.

There are, however, some doubts upon this point, and it is partly for the purpose of trying to determine this question that I brought her before you to-day. While many of the symptoms of cancer of the stomach are present, some of the most distinctive are wanting. One of them is obstruction of the pylorus. There is no symptom of obstruction at this situation. In the vast majority of cases of cancer of the stomach, the pylorus is the point affected—in fact, the pyloric orifice of the stomach is, next to the uterus, the most frequent seat of carcinoma. There may of course be cancer of the cardiac orifice with obstruction, but under such circumstances the food is regurgitated immediately after ingestion and little altered. On the other hand, when the obstruction is at the pylorus, the vomiting comes on a couple of hours or even longer after a meal. It may not occur for several days after the food has been taken, but the longer the interval the greater the amount vomited. This is owing to the fact that the stomach becomes gradually dilated, and the longer the case lasts the less frequent is the vomiting. I recall an instance of cancer of the pylorus, in which this was particularly marked. In this patient the vomiting was sometimes at intervals of ten days, and then a bucketful was ejected. At the autopsy, there was found cancer of the pylorus with great dilatation of the stomach, from which I removed over a gallon of fluid. In the present case there has been nothing of this kind.

Let me again refer to the situation of the tumor, which lies to the left of the umbilicus. This is, however, not inconsistent with the view that there is cancer of the pylorus. I have several times called attention to this fact. If you examine the books, you will find that they state that the most frequent situation of the tumor in cancer of the pylorus is in the epigastric region, a little to the right of the median line, and below the free border of the ribs. I do not know how many cases of this disease I have seen, but in at least half a dozen the tumor was exactly in the position occupied by the mass in this case. In the patient with the enormous dilatation just alluded to, the tumor was in the same situation, but a little to the right. At present, I recall no case in which the tumor has not been in the umbilical region. The situation of the pylorus in health cannot be said to be fixed, but it is probably most frequently to the right of the median line, and a couple of inches below the ribs. I cannot but think that writers have been misled by this normal position, to expect that a tumor of the pylorus is always found in the same place. But it must be remembered that the tumor soon acquires weight, and that the stomach is easily displaced; to such displacement dilatation often contributes. Apart from this, if you examine the position of the pylorus after death, in cases where there has been no disease of the stomach,

you will find that it is not constant, and that it is as frequently to the left of the median line as to the right. So that, although we find the tumor in this position, we have in this fact nothing to diminish the probability of this disease being cancer of the pylorus; the strongest point against cancer of the pylorus being the fact that there is no obstruction.

What else could it be? The most likely disease, after cancer of the stomach, would be cancer of the pancreas. I have seen two or three cases of cancer of this organ, in which the tumor occupied this situation. In a case which I had a year ago, there was a tumor in precisely this situation. The autopsy proved it to be cancer of the pancreas, as had been suspected before death. Is there anything which will help us in this dilemma? In the first place, in a large proportion of cases of cancer of the pancreas, there is jaundice; there is no jaundice in our patient. Again, in cancer of the pancreas there are symptoms of indigestion, which resemble those present in this patient more than they do those of typical cancer of the stomach, excepting the vomiting of blood, which does not occur in pancreatic cancer. In the latter there is a tendency to diarrhoea, and frequently the liquid stools contain fat; sometimes this is very manifest. In the case to which I have just alluded, the diagnosis was made from the presence of indigestion with irregular vomiting, and the characteristic condition of the stools. By the use of opium, bismuth, etc., the diarrhoea is checked for a time, but in a few days the liquid discharges seem to burst through a barrier which held them temporarily in check. In the patient before you to-day, there is but one of these symptoms, *i.e.*, indigestion. The stools have been carefully examined, but no fatty matter has been found; neither is there any diarrhoea. There is, on the other hand, some constipation, although it is not as marked as in cancer of the pylorus with obstruction. Balancing these facts, therefore, the probabilities are in favor of the presence of cancer of the pylorus, notwithstanding the absence of the most valuable symptoms of obstruction.

Cancer involving other portions of the stomach does not produce a circumscribed tumor such as we have here. The cancers affecting the greater and lesser curvatures are diffuse growths and soft cancers, whereas those at the pylorus are circumscribed tumors and epithelial or scirrhus cancers in nature.

The question of *treatment* is an important one. For although it is impossible to do anything to remove the growth, we should not, at the same time, be apathetic in the matter, and I am quite sure that a good deal more can be done than is commonly thought possible. As a rule, the food taken into the stomach is sooner or later rejected; but this is partly because the stomach is disquali-

fied to prepare it; to reduce it, by digestion, to the liquid state it must have to enable it to pass through the pylorus. Now if we can digest the food partially or altogether, before it is put into the stomach, we obviate this difficulty. Still better will we accomplish our purpose if we can introduce it partially or wholly digested into the rectum.

The stomach has no use outside of the preparation of the food for digestion. It is not a vital organ in the sense that the heart and the lungs are vital organs. It is important so far as it prepares the food, but if the food can be prepared for absorption outside of the body, its necessity is diminished, as it also is, if we introduce this artificially digested food into the rectum. Or we may use both of these methods. We can, by the use of prepared food, diminish the labor of the stomach, and by using the prepared food by the rectum, we can relieve the stomach of all labor. This is being done of late by peptonized foods of various kinds. The food may be prepared by the *extractum pancreatis*, which is now made by a number of pharmacists. Three to five grains of the extract added to a pint of milk and placed at a temperature of 100°, will in one hour peptonize all the casein. A curd is first produced, which subsequently undergoes digestion. The addition of rennet will then not produce coagulation. Milk thus prepared makes little demand upon the stomach for digestion, and it can be introduced by the rectum with good effect. The peptonized milk has a peculiar bitter taste, and unless this bitterness is present the digestion is unaccomplished. The digestion will take place at a lower temperature than 100°, but it takes longer.*

I have had very satisfactory results from another method of preparing the food for use by enema, the only objection to it is that it is a little troublesome. I saw it suggested in 1876, but by whom I cannot now recall, and I have since frequently used it when the patient is to be maintained solely by enema. The plan is to take from one and a half to two pounds of beef with the fat removed, and from one-half to one pound of fresh pancreas. The pancreas is finely chopped and afterwards bruised in a mortar with tepid water at a temperature of 100°. It is then strained through a cloth.

* The following method, slightly modified from that usually recommended, after numerous trials by patients, has been found most satisfactory: Take one pint of skimmed milk, to which add one gill of water. Heat to 140° F. (a temperature at which the finger can be immersed for half a minute). After taking from the fire, stir in three grains of powdered pancreatine, and fifteen grains carbonate of sodium. Place in a covered kettle or jug and roll up in a cossey (an ordinary gossamer water-proof coat answers admirably well), near a stove or register to keep warm. Let it remain thus for an hour and a half; it then resembles slightly thickened milk, but there is no curd. Pour it into a pitcher and set it aside to cool in the open air. Thus prepared, it has the slightest perceptible tinge of bitterness, and is very palatable.

The juice obtained is intimately mixed with the meat, which has previously been chopped into small pieces. The product is next allowed to stand at a temperature of 100° for two hours; it is then ready for use. This amount suffices for two daily injections. The preparation decomposes very quickly, so that it has to be made fresh every day. I was surprised at what I had accomplished by this method. In the man with the dilated stomach to whom I have referred, nothing could pass the pylorus, but during the use of daily enemata there occurred each morning an evacuation from the bowel as natural as though the patient were living on a mixed diet and digesting it properly. The extract of pancreas will probably answer as well as the method which I have described, but I have not had any experience with it.

In this connection, I want to call your attention to a little book by Dr. William Roberts, *On the Digestive Ferments, and the Preparation and Use of Artificially Digested Food*. After an account of normal digestion, he gives a description of the methods of preparing food by the use of these ferments. The method which I have just given you is not contained in this book.

The use of peptonized food is advantageous in many diseases, and especially in the diseases of children. Most cases of diarrhoea in children are due to indigestion, but by means of the extract of pancreas, we have the power to prepare the food for absorption, thus lessening the labor of the stomach. The so-called *liquor pancreaticus* may be used for the same purpose, but I have had more experience with the extract.

By using this method of alimentation we can, in cancer of the stomach, prolong the life of the patient and make his condition less burdensome. But it occasionally happens that rectal alimentation does not appease the sense of hunger; and I have had patients who, in spite of all injunctions to the contrary, and who, knowing themselves that they would sooner or later reject it, would take food by the mouth.

It has been proven, over and over, that life can be sustained in this way. Not only have dogs been kept alive for months by rectal alimentation, but the same thing has been done with men. But where it is possible, the stomach should be made use of to some extent, and thus save the rectum.—*Med. News.*

POTTS DISEASE.

CLINIC BY PROF. SAYRE.

I here present to you a little boy aged five years and six months, who was brought to me a year ago suffering from Pott's disease of the upper dorsal vertebrae. When he was fifteen months old he fell

out of the back of a baby carriage and sustained severe bruises, and in a little while commenced to complain of pain in the vertebral column: at the end of a year he had become a cripple, but previous to this he had an attack of the measles; occasionally he would fall down with apparent paralysis of the limbs. Before he was brought to me the child had been wearing a brace for five months, but when I first saw him the brace had not been worn for three weeks, but even at that time there were extensive lesions upon each side of the spine at the point of the disease, which had been caused by the brace; and upon the sides of the ilium were erosions caused by the instrument; here you have another case fully illustrating the result of wearing these so-called braces. I have several patients at the present time suffering from severe abscesses produced by these instruments, and although they have recovered from the disease of the spine, they have a necrosed ilium as a result of its use in the earlier stages of their spinal disease. At the time this child was brought to me he was unable to stand, the deformity being very great as you will observe by the photograph which I had taken at the time; (photograph passed to class) but now you perceive that he can stand erect without the plaster-of-Paris jacket. I applied the plaster jacket and head rest immediately upon his coming to me, and during the year following put on several new jackets as the deformity decreased and the child grew and developed, until he has reached the improved condition in which you now see him.

You will observe that as I place my hand upon his head and press the vertebræ together it causes a sensation of pain, showing that the disease yet remains, therefore he will require the jacket and head rest for some time yet, and which I intend to apply before you. First, you will observe that I apply this knitted shirt, which fits the body close, to the skin at all points, being fastened between the legs by a safety pin. I now place around the neck a soft leathern collar with two straps on either side, one passing over the inferior maxilla and the other over the occiput: these are fastened to this small cross bar above the head. I now pass two slings under the arms which are also attached to the cross bar, and the child is ready for suspension. I now raise the child up to his fullest height, but as you observe his feet still remain upon the ground; the extension must always be within the limits of comfort to the patient. If you find you have too much extension, at once lower the patient as requisite; by watching the countenance of this child I can at once tell when I have secured the necessary amount of tension.

Under no circumstances ever fasten the rope by which you make your extension, but leave it in the hands of some intelligent person.

The child being now suspended is ready for the

application of the plaster of Paris bandages. Having previously placed a pad under the shirt over the chest and abdomen, I pass the bandages around the body, my assistant rubbing each band into the one previously applied; having made the jacket of moderate thickness I now apply the *jury mast* for supporting the head. This consists of a light frame-work formed to fit the body and composed of two flat side rods and cross bars, from the centre of which passes up a central rod curving over the head, at the point of which is a small cross bar; affixed to this frame-work are thin strips of tin perforated in each direction and passing around the sides, the burrs from the perforations holding the frame in the bandages. This being now adjusted the plaster bandages are again applied completely enveloping it in the centre of the jacket. The child is now released from suspension and laid upon an air bed. You must however be careful in laying the child down that he does not bend his back, or your labor will be lost. I now draw out the pad from the anterior part of the jacket and while it is yet wet you will observe that I commence to mould it over the crests of the ilium and thus secure a shoulder at this point, and now I mould it below the ilium antero-posteriorly, widening it out at this point and giving the jacket an hour glass contraction as it were, and in this manner the jacket is held firmly upon the child. It now being sufficiently dry I cut it out under the arms to allow of free motion at this point; and I also cut out a portion at the hip to allow of the thigh being flexed upon the abdomen. As soon as the jacket has become thoroughly dry I shall place this small leathern collar with its chin pieces around the neck; the straps passing up at the side of the head are then fastened to the cross bar suspended from the jury mast over the apex of the head; and by this means support the weight of the head, and thus remove all the pressure from the spinal column.

The child should then be out in the open air as much as possible, and can run around as best suits him, as he is now free from all pain. (The child here stated that he felt no pain whatever; having evidently enjoyed the suspension as at one time he lifted his feet from the ground and wanted to swing by the suspension attached under the arms and around the neck.)—*N. E. Med. Monthly.*

THE TREPHINE IN HEAD INJURIES.

At the recent meeting of the Kentucky State Medical Society the question of "Trephining in Injuries of the Head" was brought to the attention of the profession in some carefully recorded observations on this important class of injuries by Dr. W. O. Roberts, of this city. The cases reported by him were thoroughly instructive, and demonstrated clearly the value of the operation in appro-

priate cases, and the importance of accurate discrimination in the selection of cases. In the course of the discussion which followed, Dr. D. O. Yandell and Dr. J. N. McCormick related some instructive clinical experience in confirmation of the views presented by Dr. Roberts. The attention of surgeons is again directed to this important question by Dr. Henry B. Sands, of New York in a paper read by him at the recent meeting of the New York Surgical Society.

The state of professional opinion upon this question of interference in head injuries is in such an unsettled condition that its discussion at the present time can not but prove of great advantage. A few surgeons in this country have of late years advocated a revival of the obsolete practice of trephining in simple fracture, when attended with displacement and in the absence of head-symptoms. With many practitioners there is an expression prevailing that in all fractures, even of the most simple character, when accompanied with depression, the trephine should be at once applied. It is to this feature of the question, the use of the trephine as a preventive measure, that we desire to direct attention more especially at this time.

This practice is particularly in favor in cases of simple comminuted fracture. It is argued that unless the fragments of bone are removed they will become necrosed, and establish thereby intra-cranial inflammation. While opposed to the known laws and behavior of fracture in other portions of the skeleton, this practice is contra-indicated by all clinical experience. The application of the trephine, too, in those cases where the inference is that some sharp fragment of the inner table has penetrated the membranes, is also a most injudicious and harmful practice. It must be remembered in connection with this class of injuries that the operation of trephining converts a simple into a compound fracture, a most serious alteration of the condition, and one to be induced only under circumstances of absolute necessity. As indicated in this connection by Dr. Sands, the unbroken skin furnishes a protection here more sure and trustworthy than anything yet offered by antiseptic surgery.

We have known the trephine to be applied in cases of fracture where the head-symptoms were quite ambiguous and indefinite, and where the depression was very slight. The result, so far as we have observed, under these circumstances is almost invariably fatal. Almost every practitioner is familiar with instances of great depression of the cranial arch, in which excellent recoveries have followed the treatment without interference. The powers of nature in these cases is remarkable. It is well known that when the depressed bone causes symptoms of compression, these symptoms may permanently disappear without an operation. The question of interference in fractures of the skull is to be de-

termined in connection with the nature of the damage done to the intra-cranial contents. The question is not one of prevention, but relates to the relief of lesions already induced. There are, of course, conditions in which the way is quite clear and the indications for trephining are positive. The guides to rely upon in deciding a course of action are the indications of contusion or laceration of the brain, and hemorrhagic extravasation. If the injury is limited to a depressed fragment of bone, without lesion of the brain and its membranes, the compression is rarely of long duration. With our present means of diagnosis, the course to be pursued in cases of simple fracture, with head-symptoms, is not easily determined. Each case is to be determined by the nature of the symptoms referable to the brain. It is to the analysis of these symptoms that more light is especially desired. That the range of the operation should be more definite, and that the indiscriminate use of the trephine in cases of simple fracture is to be condemned, will be admitted by all who give the subject the attention its importance deserves. That the operation which converts a simple into a compound fracture, and which in the most skillful hands may be accompanied with injury to the brain or its membranes, is inadmissible for purposes of prevention is the lesson of reason as well as of experience.—*Lou. Med. News.*

THE USELESSNESS OF STYPTICS.

In a paper read before the Philadelphia County Medical Society, Dr. J. B. Roberts (*Philadelphia Medical Times*) argues with much force against the use of styptics in general surgical practice. He states his objections to their employment in the following propositions: 1. Their reputation as hæmostatic agents leads practitioners to resort to them when more trustworthy methods are needed. Thus valuable time is lost, for, after temporary arrest, the hemorrhage recurs in the already anæmic patient, and is perhaps followed by disastrous results. 2. If they fail to control the bleeding—which they generally do if the hemorrhage is important—it is often so difficult to rid the surface of the pasty clots that subsequent ligation of the vessels is well-nigh impracticable. 3. Many styptics prevent union by first intention, because they irritate the raw surface, lead to inflammation, or induce suppuration.

He says, further, that Monsel's salt—the subsulphate of iron—has probably more reputation than any other styptic, yet it is the most objectionable of all. It covers the wound with black, sticky clots, which obscure further examination of the surface, prevent primary union, and may even allow bleeding to occur beneath them. I have seen such

leathery masses of coagulum raised up into vesicles by the subjacent hemorrhage.

There are but two scientific and satisfactory ways of arresting hemorrhage as usually observed in the practice of general surgery: 1. The first is occlusion of each individual vessel by ligation, torsion, or acupressure, and is generally not required for arteries smaller than the facial, nor for veins, except those of the largest calibre. 2. The second method is direct pressure by compresses and bandages, which, if properly applied, will always be effectual when the first method is not demanded. It is to be adopted when there is oozing from small arteries and capillaries.

In all cases of traumatic hemorrhage it should be recollected that a man can lose many fluid ounces of blood without serious injury, and also that no artery or vein can bleed if it is compressed by the fingers. These facts assure the surgeon that there are always time and means to control the bleeding, at least temporarily. Many arteries that spurt freely when first divided soon spontaneously stop bleeding. Therefore it is foolish to interrupt the steps of an operation by ligating every little vessel that throws out a jet of blood. Let the surgeon proceed, even if the arteries are quite large, and when he has finished his incisions he will find, to his surprise, very few points requiring ligatures. He should ligate these, and, after washing away the loose clots, make moderate and equable pressure. There will then be no part for styptics to play. It is possible, perhaps, that there may be occasional instances of oozing where pressure cannot be effectually applied; but these are certainly so rare that they do not materially affect the truth of the proposition that styptics are useless.—*Am. Med. Digest.*

THE HUMORS OF EXAMINATIONS.

It is related of a rough-and-ready examiner in medicine, that, on one occasion, having failed to elicit satisfactory replies from a student regarding the muscular arrangements of the arm and leg, he somewhat brusquely said, "Ah! perhaps, sir, you could tell me the names of the muscles I would put in action were I to kick you?" "Certainly, sir," replied the candidate; "you would put in motion the flexors and extensors of my arm, for I should use them to knock you down." History is silent, and perhaps wisely so, concerning the fate of this particular student.

The story is told of a witty Irish student, who, once upon a time, appeared before an Examining Board to undergo an examination in medical jurisprudence. The subject of examination was poisons, and the examiner had selected that deadly poison, prussic acid, as the subject of his questions. "Pray, sir," said he to the candidate, "what is a poisonous dose of prussic acid?"

After cogitating for a moment, the student replied, with promptitude, "Half an ounce, sir!" Horrified at the extreme ignorance of the candidate, the examiner exclaimed, "Half an ounce! Why, sir, you must be dreaming! That is an amount which would poison a community, sir, not to speak of an individual?" "Well, sir," replied the Hibernian, "I only thought I'd be on the safe side when you asked a poisonous dose!" "But, pray, sir," continued the examiner, intent on ascertaining the candidate's real knowledge, "suppose a man did swallow half an ounce of prussic acid, what treatment would you prescribe?" "I'd ride home for a stomach-pump," replied the unabashed student. "Are you aware, sir," retorted the examiner, "that prussic acid is a poison which acts with great rapidity?" "Well, yes," replied the student. "Then, sir, suppose you did such a foolish thing as you have just stated, said the examiner; "you ride home for your stomach-pump, and on your returning you find your patient dead. What would you, or what could you, do then?" asked the examiner, in triumph, thinking he had driven his victim into a corner whence there was no escape. "What would I do?" reiterated the student. "Do?—why, I'd hould a post-mortem!" For once in his life that examiner must have felt that dense ignorance united to a power of repartee was more than a match for him.—*Chambers' Journal.*

THE TREATMENT OF PNEUMONIA.

We are indebted to Dr. W. Thornton Parker, Acting Assistant-Surgeon, United States Army, Fort Elliot, Texas, for the following item, communicated to him in a private letter by Prof. Baumlér, of the University of Freiburg, Baden: "Our treatment in cases of pneumonia in the Freiburg Hospital is chiefly directed toward sustaining the strength of the patient until in the natural course of the disease the pyrexia leaves him. As the pyrexia is one of the chief causes of the exhaustion which in severe cases gradually sets in, we try to keep down the body heat by means of cool baths or wet packing, as well as by quinine (fifteen to twenty grains in one dose in the evening) or salicylate of soda (sixty to eighty grains within an hour in the middle of the night). The patient must be sufficiently fed by broths, beef tea and milk, and in every case we give from one-half to one pint of light wine, to which the populace is accustomed, in the twenty-four hours. *An ice-bag is applied to the chest when there are pleuritic pains.* Dover's powder or morphia is only given when there is restlessness or great pain or diarrhoea. With very sharp pains in the side we apply the morphia hypodermically. If there be much bronchial catarrh accompanying the pneumonia, we give ipecacuanha

in infusion with or without opiates. Sweet spirits of nitre I have never employed in pneumonia. Altogether, it is but very seldom used in Germany." *Med. and Surg. Reporter.*

VARIOUS PRESCRIPTIONS.—The man who commands the largest practice in Philadelphia, and who is at the same time the favorite lecturer on clinical medicine, is Prof. Pepper, of the University. He hardly ever delivers a lecture that is not published. They tell me he makes up by never writing an article, probably because he lacks the time. The way the doctor thumbs around on patients and brings out the points here and there is astonishing. Nothing but an immense experience and a close observation of disease could have given him his accurate knowledge. We pumped him on his way from the wards to the amphitheatre on typho-malarial fever. Dr. Pepper does not believe there is such a disease. He thinks that cases thus diagnosed by practitioners were either typhoid-fever, with some malarial symptoms, or simple continued fever. He believes that physicians have confounded complications occurring in cases of disease with disease. Typho-malarial fever so-called is no more a distinct disease than is typho-pneumonia. It should be treated as typhoid fever, and the complications are treated as such, just as they are when occurring in pneumonia, bronchitis, dysentery, etc. And the doctor nodded his head and passed into the amphitheatre. He had crushed a favorite idea of mine, and I take revenge by hurling the lesson at the heads of some of my western brethren.

Dr. E. T. Bruen is Prof. Pepper's assistant, and is preparing himself to fill the Professor's shoes in the future. He is connected with the dispensary of the Children's Hospital, where he gives instruction to graduates. At several of the meetings I gathered some good points, which are here presented.

A case of whooping-cough in a boy four years of age presented the symptoms of an acute attack of the disease. Dr. Bruen prescribed:

R Bromide quinine.....grs. xvi.
Syrup gum arabic.....fl. ʒ j.
Syrup ginger.....fl. ʒ j. M.

The patient was ordered to take a teaspoonful of the medicine four times a day. If no relief was experienced, it was to be increased. The mother was directed to prick a hole with a pin in a piece of paper every time the patient had a severe attack of cough during the day. She then compared the holes made on the different days, and if they did not diminish she increased the doses of the medicine up to eight teaspoonfuls a day. As the holes decreased she was to give fewer doses.

A little girl, nine years of age, suffering with obstinate malarial fever was ordered to take half-drachm doses of cream of tartar, dissolved in water, twice a

day. Dr. Bruen thinks that the cream of tartar assists quinine in its action as an antiperiodic.

In a case of mucous diarrhoea in a child of one year of age, Dr. Bruen prescribed what he called his favorite prescription:

R Bismuth. subnit.,.....gr. lx;
Fl. ext. rhubarb,.....gtt. viij;
Syrup. blackberry.....fl. ʒ ss;
Elixir orange,.....fl. ʒ ss. M.

Of this the child was ordered to take a teaspoonful four to six times a day. Proper feeding—barley-water, milk and limewater—was also directed. Starchy food was positively prohibited.

A little girl ten years of age, was afflicted with tuberculosis of the lungs. She was pale, emaciated, and harassed by a cough. Dr. Bruen prescribed:

R Olei morrhue,.....fl. ʒ j;
Syr. calcii lactophosphatis,....fl. ʒ ij;
Syr. ferri iodidi,.....fl. ʒ j;
Liquor calcis,.....q. s. ad. fl. ʒ ij.

M. Sig: A teaspoonful three times a day after meals.

As an embrocation, equal parts of cod-liver oil and soap liniment were ordered. The patient was to wear warm flannels and take outdoor exercise. For the cough:

R Acid. sulphuric dil.,.....M xvj;
Tr. opii deodorat.,.....M viij.
Syr. pruni Virgin.,.....fl. ʒ j;
Aqua,.....fl. ʒ ij.

M. Sig. A teaspoonful or two every two or three hours.

A case of diphtheria in a child two years of age was given:

R Tr. ferri chloridi,.....fl. ʒ ss;
Acid. acetic dil.,.....fl. ʒ j;
Liq. ammon. acetat.,.....fl. ʒ j;
Syrupi,.....fl. ʒ ij.

M. Sig: A teaspoonful three times a day.

To be applied locally with a camel's-hair pencil:

R Comp. tr. benzoin,.....fl. ʒ ss;
Carbolic acid,.....gtt. x;
Glycerin, pure,.....fl. ʒ jss. M.

The liniment most frequently prescribed by Dr. Bruen for his dispensary patients is one cupful of vinegar, a half cup of turpentine, and the white of an egg well beaten together. As a stimulating liniment to the chest for pneumonia and bronchitis in children, this is excellent. His favorite antiperiodic in these cases is the citrate of iron and quinine. This is also often prescribed as a tonic in anemic conditions where malaria seems to be the cause.—*Correspondence Louisville Medical News.*

HYSTERICAL SPINE.—Speaking of "Hysterical Spine." Dr. Vincent gives the following very plain points as aids to diagnosis (*Med. Press and Circular*)—"We are all aware that, when any of the tissues of the body are the seat of acute or chronic inflam-

mation, the pain which results is augmented by pressure; but the pain we are considering, and which is alleged by the patient to be "all down the spine," is not increased by pressure. For instance, if the patient is placed face downward on a firm mattress or couch, the whole weight of the surgeon's body transmitted to the spine by means of the open hand will give no pain; but, on the contrary, if the finger will be drawn lightly over the spinous processes, from the cervical portion down to the sacrum, we shall have a scream or sob, together with considerable cringing or flinching. So the apparent suffering of the patient bears no proper proportion to the pressure exercised. Another test producing a very characteristic symptom of these cases is to tap gently the spinous processes as the patient stands erect before you. The same flinching will be observed, and by these means one is often enabled to more or less localize the pain. The seat of this will generally be found in the lumbar region, especially if we can trace any uterine irregularity arising from any cause whatever. The second symptom is deformity. This may exist in various degrees, from being hardly noticeable to an extent simulating the worst form of lateral curvature; but, unlike that far more serious disease, the hysterical deformity can in a minute be reduced, although when the pressure or manipulation necessary for this is removed the deformity returns; yet for the moment it has vanished, and we have satisfied ourselves that there is no structural change. These two symptoms will generally be found sufficient to determine the nature of the case, especially if our diagnosis be assisted by the existence of any of those morbid conditions of emotional centers so well-known and recognized in the phenomena of hysteria."—*Med. Review*.

INTRA-UTERINE INJECTIONS IN THE TREATMENT OF PUERPERAL SEPTICEMIA.—T. Gaillard Thomas, M.D., in *N. Y. Medical Journal*, March 31, 1883, gives the following case, which seems to him to illustrate what should be the accepted treatment of puerperal fever, or puerperal septicemia, at the present day. The case was that of a lady in the higher walks of life whom I was called to see about a month ago, in consultation by her physician, a man of wide experience. She was a primipara, was taken in labor at 4 o'clock Sunday afternoon, and at 9 o'clock in the evening was delivered of a female child, without any difficulty or assistance. Her physician examined the external genitalia carefully, and found no tear whatever. The nurse was instructed to syringe out the vagina carefully the next day with carbolized water, which she did. The first 48 hours passed by without any bad symptoms at all, but, on visiting her on Tuesday morning, the physician found a temperature of 101° F., and in the evening it had risen to 102.5° . The next morning, the morning of the fourth day, the

temperature was 103° , and the patient began to complain of very severe pain in the right iliac fossa. There had been no chill. At 5 o'clock in the afternoon, the temperature was 106.5° in the mouth. The patient's appearance became wild, as of one who was about to have puerperal mania; the skin was hot, and she was crying out with pain, although she had received a good deal of morphine.

Having now been called to see the patient, I took the temperature in the mouth myself, and confirmed the record of her physician, that it was 106.5° . The pulse was 145. Making a vaginal examination, I found a bilateral laceration of the cervix uteri extending nearly up to the vaginal junction. Probably this extensive laceration partly accounted for the rapidity and the ease of the labor as occurring in a primipara. I urged that the uterus should be washed out with carbolized water at once, but her physician had never seen the method practised, and was strongly prejudiced against it; he finally consented only because it was apparent that unless something decided was done the patient would soon die. Using the Chamberlain tube and the Davidson syringe, Dr. Jones, and afterward Dr. McCosh, continued to wash out the uterus with carbolized water every four hours during the night, and the next morning the temperature was found to have sunk from 106.5° to 101° ; the pulse had fallen from 145 to 120; the patient, who had been given opium quite freely during the night, declared that she was very much relieved. Indeed, the relief had been so extraordinary that they began to believe that the danger was not real at all; that some exceptional circumstance had occurred, and that there was no septicemia. The uterus was now washed out at longer intervals, but at once the temperature went up to 102° , 103° , 104° , and 105° , and the patient again began to look maniacal. The uterus was now washed out every three hours, opium was freely administered, ten grains of quinine were administered every eight hours, ice-water was passed through a coil of rubber tubing placed over the abdomen; and as long as this treatment was kept up the temperature did not rise above 101° or 102° ; but so soon as they ceased to wash out the uterus the temperature at once rose to 104° , and at times to 105° . This fact was proved by repeated trials.

After this treatment had been continued for ten days, a physician remaining with the patient day and night, giving the injections every three hours, and thirty grains of quinine during the course of the day, it was believed to be time to stop it; but in less than 24 hours the temperature again rose to 105° . I mention the amount of quinine which was being taken particularly, so as to prove positively that there was nothing of a malarial character in the case at all. On the sixteenth day after deliv-

ery, the tenth day after the commencement of the high temperature, the intervals between the uterine injections were extended from three hours to four, then to five, six, and seven hours, and finally they were discontinued altogether, and at the same time the administration of quinine was given up and the coiled tubing was taken off. Opium was continued in small doses for a while longer, and the patient recovered entirely.

I wish to contrast this case with another which I saw just before—that of a woman who had been recently delivered of her third child. When I was called to see the patient the temperature was 106° ; she had been taken with violent pain in one iliac fossa, and had been put five days before pretty profoundly under the influence of opium, and a blister had been applied over the whole of the abdomen. Large doses of quinine had likewise been administered. When I saw the patient, the use of intra-uterine injections was begun at once, but the patient lived only 24 hours, and died in a state of coma.

It seems to me that the time has arrived when puerperal septicemia should be treated upon just as simple a plan as septicemia of any other kind is, namely, by washing with some antiseptic fluid the surface where the disease originates—some fluid which will remove the poisonous material which is being absorbed, and also, so far as possible, neutralize its poisonous qualities. In brief, I would say that puerperal septicemia, with our present light on the subject, should be treated in the following manner: First, wash out the uterine cavity completely with some antiseptic fluid; second, quiet all pain by opium; third, get the peculiar influence of quinine upon the nervous system; and, fourth, keep the temperature, at all hazards, at or below 100° by the methods which we now possess. Three years ago, at the American Gynecological Society, which met in Baltimore, I took the ground which I take to-day regarding this subject, and only one gentleman in the entire society supported my view. Every other member who spoke referred to the dangers of introducing air into the uterine sinuses during the injection, etc. But I believe that the dangers attending the use of the injections are counterbalanced by the benefits to be derived. I do not think there is the least probability that air will be introduced if a tube of large size—as large as the finger—is used. But when a catheter is employed there is some danger of inserting it into a sinus and introducing air and fluid together directly into the vessels.

REPARATIVE SURGERY OF THE GENITAL TRACTS—Dr. M. A. Pallen of New York, in a paper on this subject, writes: All fallings of the uterus, from the slightest prolapse to the completest procidentia, necessarily involve more or less folding of the vagina upon itself; and, should the

substructure, the perineal conjunction, be absent, the process of vaginal folding ultimately becomes complete inversion. Without the necessary amount of time to properly discuss the relations of vaginal dislocations to the perfect integrity of the perinæum, I propose to formulate certain propositions.

1. Should there be perineal laceration, even if the uterine structure and circumuterine spaces be perfectly normal, the organ, sooner or later, necessarily sinks in the pelvis, most frequently in retroversion.

2. All perineal lacerations, from a simple sub-mucous muscular sundering (of the *transversus perinæi*, *sphincter*, and *levator ani* conjunctions), to a rent that extends into the bowel, necessarily beget vaginal dislocation, primarily as a slight, later as a complete rectocele, to be followed by a prolapse of the anterior wall, causing urethrocele and cystocele.

3. Urethrocele and cystocele seldom occur spontaneously; they ensue from pressure above (very rarely), or they follow from perineal sundering or laceration. I have never seen a case of cystocele, or even much urethrocele, that was not associated with some prolapse of the posterior vaginal wall.

4. All operative procedures for the *suspension of a prolapsed uterus must be directed mainly to the posterior vaginal wall*, because it arches upon the perinæum below and the uterus above, serving chiefly as a column of support. The anterior vaginal wall, being straight and shorter, serves rather for the support of the urethra and bladder, and being adherent to the pubo-vesical spaces, it prevents the full bladder from rolling the uterus in retroversion.

5. Operations restoring the integrity of the perinæum and posterior vaginal wall, usually develop symmetrical correlations of the canal. In cases of complete procidentia, a perinæum restored by plastic procedures which strengthen the recto-vaginal septum will eventuate in a permanent cure, a condition I have never seen in making operations confined strictly to the anterior vaginal wall.

These propositions assumed, I feel satisfied that very many successful issues of *perinco-vagino-plasty* prove that the theory upon which the operation was based is correct, viz., that the conjunction of the transversus perinæi, sphincter ani, pubo-ischio-coccygeus, and levatores ani muscles, (described, but never actually demonstrated as the perinæum) is the true and correct foundation upon which the posterior vaginal wall rests, and that the support rendered by the connective tissue in front of the rectum is but secondary, in consequence of the variable calibre of the bowel. The anterior column of the vagina is straighter and shorter, and, as before said, mainly supports the bladder and urethra; but the posterior vaginal column, added to the masses of blood-vessels furrowing the peri-vaginal connective tissue, tends to support the uterus; therefore, when the basement support of the vagina (peri-

næum) gives way, it folds down upon itself, and drags the uterus in retroversion. I would state *en passant*, that I exceedingly doubt the efficacy of the so-called ligamentous support of the uterus, farther than the mis-named structures (broad ligaments) serve as vehicles for carrying masses of erectile tissue and blood-vessels; and that in the healthy female the uterine body maintains its normal plane, or it is lifted, or it is depressed therefrom, in consequence of plenitude or emptiness of these same blood-vessels. Furthermore, I am disposed to think that all misplacements, except from direct or mechanical causes, depend upon fracture or destruction of the connective tissue in the circumuterine spaces, because of pathological changes in the blood vessels.—*British Medical Journal*.

TREATMENT OF LUMBAGO.—Dr. Fraser says, in the *Lancet*: For the last eighteen months I have been adopting a very successful plan in the treatment of lumbago. While I held the office of resident physician in the Edinburgh Royal Infirmary, I frequently had occasion to perform the operation of cupping in Bright's disease of the kidneys. Some of these cases were attended with severe pain in the loins, and I was so impressed with the great relief from lumbar pain which followed cupping that I thought it might prove a valuable remedy in lumbago, and accordingly the next case of that disease which came under my care was cupped, and I am happy to say that the trial was rewarded with complete success. Since that time I have treated a large number of cases of lumbago by dry-cupping, many of them with the disease in its most severe and aggravated form; and I have been able to give almost immediate and complete relief to most of them, and in no case have I failed to alleviate materially the suffering of the patient. I am convinced that this is a very valuable although simple plan of treating a very common, troublesome and painful affection. I find that the subcutaneous injection of sulphuric ether, chloroform or morphia locally is a valuable adjunct in the treatment of such cases, but in the majority of them the cupping alone is sufficient to give relief. This operation should be preceded and followed by the administration of a saline cathartic.

THE EXTERNAL APPLICATION OF BELLADONNA was resorted to by Dr. Costine (London *Lancet*), in a case of intestinal obstruction, and was followed in a few hours by a discharge from the bowels. There was obstinate constipation, no evacuation having taken place for fourteen days. Vomiting had occasionally taken place, and there had been much pain in the abdomen. Examination showed much distension of the belly, though the walls were not tense. There was occasionally a soft, defined swelling in the right iliac region about the size of the cæcum, but no lumps or bowel could

be felt; there was no hernia and nothing abnormal could be felt per rectum. A large quantity of fluid could be injected. The patient had taken all kinds of purgatives without effect. One grain of opium every six hours was ordered; also cold, strong beef tea and milk in small quantities often repeated. The next day there was freedom from pain and vomiting, but on the second day after, he was much prostrated, with a frequent and intermittent pulse and faecal vomiting. Six ounces of brandy in twenty-four hours and plenty of beef tea were ordered, and one ounce of belladonna ointment spread on a large poultice was applied over the abdomen, and frequently repeated. The belladonna was first applied in the afternoon, and the same evening the bowels were opened. He progressed favourably for several days, when constipation again took place, which castor oil failed to relieve, but with the external application of belladonna, and opium internally, removed.—*Weekly Med. Review*.

THE TREATMENT OF SYPHILIS BY INDIANS.—Dr. J. Marion Sims gives the following as the ingredients of a decoction used with great success by the Creek Indians in treating syphilis:—"Fluid extract of *Smilax sarsaparilla*, fluid extract of *Stillingia sylvatica* (queen's delight), fluid extract of *Lappa minor* (burdock), fluid extract of *Phytolacca decandra* (poke root), aa ʒij; tincture of *Xanthoxylum carolinianum* (prickly ash), ʒj. Take a teaspoonful in water three times a day before meals, and gradually increase to tablespoonful doses. In making the fluid extracts, there is some risk of getting a remedy less efficient than the original Indian decoction, because the manufacturer may use roots that have been kept too long, and lost some of their active principles, while the decoction used on the plantations was always made of fresh roots just gathered from the woods. In making the fluid extracts, we should therefore be careful to have them made from roots recently gathered."—*Brit. Med. Jour.*, March 10, 1883.

CORROSIVE SUBLIMATE IN CATARRH.—Bichloride of mercury, in a solution of one grain to the pint of water, to which two ounces of cherry laurel may be added, is recommended by Dr. J. N. Mackenzie (*Maryland Medical Journal*) in the treatment of inflammatory conditions of the nose and throat with profuse muco-purulent secretion. Crusts that may be present and tenacious mucous should be removed from the surfaces, which should then be sprayed with an atomizer provided with suitable tubes. He regards it as a most valuable disinfectant in ozæna and fetor of the breath from pharyngeal disease. He found it successful in his own case in abating an acute coryza, and had good results in treating chronic nasal catarrh.—*Western Medical Review*.

TREATMENT OF CEREBRO-SPINAL MENINGITIS.—Prof. H. C. Wood, in a clinical lecture in the *Med. Gazette*, sums up as follows: During the first three or four days in the strong and robust, leeches or cups may be applied to the temples or nape and upper part of the spine. Ice-bags are applied to head and back of neck for first days—in many for a week. To relieve headache, restlessness and delirium, bromide of potash is the best agent, gr. 20 to 30 every three hours. Its efficacy is increased by adding chloral (ten grain doses usually) or in those who cannot take chloral, tinct. hyoscyami (drachm doses). It is advantageous to add also tincture of castor (drachm doses) in the hysterically inclined. If possible don't use opium, but sometimes it becomes necessary, as the remedies already named occasionally fail. The temperature is not apt to run over 104° (a very harmless height) in adults except at the close, and quinine is not indicated; moreover, it has no effect in lowering the temperature in this particular disease. The best way to lower temperature, if this be an object, is by cold affusions, cold and tepid baths, or the cold pack.

CAUTERIZATION OF THE CLITORIS IN HYSTERIA.—The late Professor Friedreich, shortly before his death, had prepared a paper, which has since been published, on this subject. In many cases of obstinate and severe hysterical affections he has found that cauterization of the clitoris by nitrate of silver has had the most beneficial effects. The cauterization must be severe, as slight superficial cauterization tends rather to aggravate the disease. The pain is at first severe and during it the patient must remain in bed. Among the cases which he gives as cured with extreme rapidity by this method are—one of paraplegia, which had lasted for a year and a half; hysterical aphonia, lasting for two years; glossoplegia, lasting for four months; tonic spasm of the spinal accessory, lasting for seven months; and several cases of general severe hysterical convulsions.—*Virchow's Archiv. and Practitioner.*

FORCIBLE REMOVAL OF UTERUS, AFTER LABOR, BY A MIDWIFE.—A case is reported in the *British Medical Journal*, by Dr. Cane, in which the uterus and some of its appendages were torn away by a midwife. Mrs. B., 29 years of age, in delicate health, had her first child five years previously, subsequently two miscarriages, due to acquired syphilis. Attended by a midwife, death occurred shortly after delivery. It was found upon examining the placenta, which had been removed by the midwife, that there was attached to it a mass which proved to be the inverted uterus, an inch of the upper part of the vagina, both Fallopian tubes, the right ovary, and half of the left one. The uterus appeared to be healthy and the ovaries normal.

TREATMENT OF DIPHTHERIA.—Dr. J. J. O'Dea, of Stapleton, N. Y., recommends the following, and, as he claims, successful local treatment of diphtheria: To the entire inflamed surface surrounding the false membrane, and close up to its border, he applies by means of a cotton-wad the following solution. R. Argenti nitrat. cryst., \mathfrak{D} j.; spt. æther. nit. dulc., \mathfrak{z} iv.; aquæ destill., \mathfrak{z} iv., M. In the same manner he then makes an application of the following mixture to the surface of the false membrane, and out to its extreme edge, but no farther: R. Acid. carbol., grs. viij.; liq. ferri sub-sulph., \mathfrak{z} ijss.; acid. sulphurosi., \mathfrak{z} ijss.; glycerinæ, \mathfrak{z} j. M. These are to be repeated twice, or possibly three times in twenty-four hours, the second mixture to be supplemented by a gargle of lime-water, thus allaying irritation and removing the *débris* of false membrane broken down by the action of the acid. When nothing remains of the deposit save some milky white patches he omits the applications and employs only the lime-water gargle of spray.—*Am. Med. Digest.*

LOCOMOTOR ATAXIA SUCCESSFULLY TREATED BY ELECTRICITY.—At the meeting of German physicians and scientists at Eisenach (*Berlin Klin. Wochen*), Dr. Th. Rumpf reported two cases of locomotor ataxia greatly benefitted by the use of faradic electricity applied with the brush, and in whom the symptoms had not returned after several years. He uses a current not quite strong enough to cause pain. One pole (the anode) is applied to the sternum; the other (the cathode), represented by the brush, is applied in rapid succession to the back and lower limbs. The duration of the application is ten minutes. The effect upon the lancinating pains is quite marked, and common sensation is greatly improved. In cases where the disturbances of sensibility and pain are very marked, and the disease is not too far advanced, this method gives praiseworthy results, which are unattainable by the older methods of treatment.—*Medical Times.*

OLEOZE, THE GERMAN MIXTURE.—Oleoze, so great a favorite in disguising unpleasant remedies, and making most compounds pleasant to smell and taste, is as follows: One part each of the oil of lavender, cloves, cinnamon, thyme, citron, mace, and orange flowers, three parts balsam of peru, and 250 parts of spirits. It is not found in any English, French, or American work. *Am. Med. Weekly.*

PATENT MEDICINES IN ITALY.—A law has just come into force in Italy which prohibits the sale of patent medicines throughout the kingdom unless the precise composition of the medicine is stated. This important decree has been promulgated by the Minister of the Interior, the customs, and the sanitary authorities.—*Medical Times and Gazette.*

THE CANADA LANCET.

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MODERN MODES OF LIVING.

What shall we eat and drink, and wherewithal shall we be clothed? These problems have been of absorbing interest ever since Adam and Eve, through their own disobedience, were driven out of Eden, and forced to earn their bread by the sweat of their brow. In each succeeding generation these questions appear to have received added importance, and to have kept pace with man's progress towards a higher and still higher civilization. At each milestone of his journey down through the ages, it has been man's good pleasure to enlarge his bill-of-fare and amplify his wardrobe. Thus, by slow degrees, he has created a plan, or system of living, wonderful for its complexity if not for its perfection. So true is this that scarcely a trace of primitive methods remains. Man now lives very much in accordance with devices of his own invention, instead of the simple, but ample provisions, made for his wants by the Creator. Adam and Eve, clothed in leaves, surrounded by their little ones, all reclining on nature's carpet, the sole article of furnishing in a dwelling whose walls were of vines and roof the ample branches of a fig tree,—partaking of a simple meal of fruits and milk, present a scene worthy the genius of an artist, and a grotesque contrast to the elaborate dress, elegant dining halls and groaning tables of later times. While but few civilized persons would advocate a return to primitive ways, yet the opinion is general, that modern methods are too artificial, and mark a wider departure from primitive customs than is compatible with physical and moral perfection.

The antediluvians do not appear to have suffered in either health or longevity from the simplicity of their mode of living.

The primary objects of eating and drinking are development and sustenance. Hunger and thirst are the signals for a fresh supply. To these natural sensations man adds another, namely, the gratification of the special sense of taste. If we leave out of view those who have not supplies at hand at all times, civilized people seldom eat from sheer hunger—they more often eat to perform a set act, or to gratify an acquired and therefore an unnatural appetite. Eating three or four times or oftener in the twenty-four hours, as most of us do, never allows the stomach to get empty. Natural hunger and keen relish of plain substantial food are conditions not to be looked for under such a high-pressure system of feeding. A stomach yet struggling with the remains of the breakfast beefsteak cannot be expected to have a craving for the dinner roast; but modern cooking, with the aid of the palate, is equal to the occasion. It matters not that the stomach has not yet unburdened itself of its last load, or that the whole system behind it is surfeited with pabulum but half elaborated, the hour for refreshments has arrived and the stated work must be performed; and performed it generally is, strange as it may appear, with evident enjoyment. But to the cook belongs the credit. When the stomach is for some time empty, and the whole system has unloaded itself and is working lightly and smoothly, hunger is experienced, and when it has reached a proper height but little of the refinement laid down in the cookery books need be regarded in the preparation of the meal, provided the food offered is nutritious and wholesome. To a healthy constitution, hunger is natural, and if the sensation is never experienced, as happens in the case of most who live in the manner referred to, it is because the owner of the stomach overrules it to an extent which prevents nature from proclaiming her own wants. Hunger being a natural law, every person should seek to so regulate his habits as to perpetuate it and to cause its return when lost. Many dyspeptics experience a desire for food which they call hunger, but it is a misnomer; the sensation is false and the result of over-indulgence at the table. It is important to discriminate between false and true hunger. Real hunger indicates a stomach prepared to receive a fresh supply; it indicates a

system in good working order and in readiness for its task. It has unloaded itself of its previous burden, and is now tendering for a fresh contract, which it promises to perform speedily and well.

Since man, like every other animal, lives by eating, it is evident that eating is a matter to be carefully examined—a duty to be naturally and properly performed. The question involves not only immediate but also remote consequences. Every physician knows that disorders of the digestive organs are extremely common, and are yearly becoming more so. The higher the civilization, and the more abundant is food, the more commonly do such troubles prevail. It is probably not too high an estimate to say, that half the adult population of civilized countries are afflicted more or less with imperfect digestion. Imperfect digestion means impure blood, imperfect nutrition and deranged organic function, which sooner or later undermines health and leaves the system an open prey to one or more of the numerous diseases flesh is heir to. By common consent malnutrition is credited with most of the disease and suffering met amongst mankind. But whence cometh this malnutrition? Is it a disease of itself, or does it proceed from antecedent causes? There can be no doubt that faulty digestion precedes both general and local malnutrition in nearly all cases of a general character. Hence faulty digestion is the primary cause of most of the diseases to which man is so ready to fall a prey. Infectious diseases aside, persons of good digestion, as indicated by robustness of constitution, do not readily take a disease, and in the midst of a useful life, bid adieu to all that is dear on earth, and shake off the mortal coil. On the contrary, such persons, as a general rule, live out their days, and die only after passing their allotted three score and ten years. But good digestion, under an over-ruling providence, does it all.

But eating has a moral as well as physical side. As a person by eating naturally and rationally may eat himself, so to speak, into good health, and the happy, joyous spirits which bodily vigor confers, so by eating unnaturally and irrationally, a person may eat himself into ill health, ill nature, unhappiness, and even crime. Unkind words, domestic jars, and social discords, are, in no small degree, due to imprudent eating. Indeed, so long as faulty digestion continues to prevail to any considerable extent, just so long will domestic disquiet and social

discord continue to drive happiness from our homes and peace and good-will from society. What to eat, and how to eat, we claim, are questions of the most vital interest to each individual and to society at large, and more worthy the attention of the hygienist and philanthropist than most people imagine.

MEDICAL COLLEGE FOR WOMEN.

In our last issue we alluded to the proposed inauguration of a medical college for women in Toronto. Since then Dr. Barrett has been actively engaged in the work of organization, and we are enabled to give the names of the new Faculty. A suitable building will be procured in the vicinity of the Toronto General Hospital, and it is proposed to open the School on the 1st of October next. The following are the names of the Faculty:—Dr. Barrett, President and Professor of the Institute of Medicine; Dr. Geo. Wright, Practice of Medicine; Dr. Adam Wright, Obstetrics; Dr. I. H. Cameron, Surgery; Dr. McPhedran, Materia Medica; Dr. Duncan, Anatomy; Dr. Reeve, Eye and Ear; Dr. Krauss, Medical Jurisprudence; Dr. Nevitt, Sanitary Science; Dr. Augusta Stowe, Demonstrator of Anatomy; and Mr. Pyne, Chemistry.

There should be no difficulty in the way of forming a medical Faculty for such an institution in Toronto, and therefore we very much question the propriety of selecting members from the Toronto School of Medicine, when there are many fully qualified medical gentlemen outside of the School who would be very glad to fill these chairs, and who should, in all fairness, have an opportunity. We also venture to think that a mistake has been made in breaking with Dr. Jenny K. Trout, who was prepared to donate \$10,000 on conditions which, when properly understood and explained, are not at all unreasonable. As matters are at present, it seems not improbable that another School will be inaugurated under the terms laid down by Dr. Trout, with ample funds, and conditions more likely to secure the sympathy of lady students than the one above mentioned. We cannot but feel that Dr. Barrett has made a fatal blunder, when a little tact was all that was necessary to have made success beyond peradventure. We also learn, through the local press, that the medical staff of the Kingston College purpose opening a separate medical school for women in October next.

ONTARIO MEDICAL ASSOCIATION.

The members of the Ontario Medical Association and others are reminded that the Third Annual Meeting will be held in the Canadian Institute, Toronto, on the 6th and 7th of June.

The papers, as will be seen below, are both numerous and varied, and the secretary has received a number of letters from all parts of the Province, indicating increased interest in the approaching meeting. We hope to see a large attendance of the profession at this meeting, and especially the younger members, who cannot fail to be greatly benefited by contact with those who have had greater experience. Young men who locate in country towns and villages, are too apt to settle down to a set routine, become rusty and filled with local prejudices; such would be greatly benefited by that friction of mind upon mind which is so well calculated to promote healthy mental development.

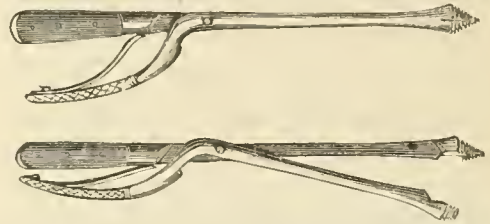
Arrangements have been made by the Secretary with the different railways to bring members and their families at greatly reduced rates, and we trust advantage will be taken of this courtesy on the part of the various railway companies, by members of the profession both young and old. It is also hoped that the members will endeavor to secure pathological specimens for the formation of a museum in connection with the Association. The committee appointed for the purpose of reporting on the desirability and feasibility of establishing a museum and library, have taken action on the matter, and will be prepared to report in favor of the establishment of a museum. The question of founding a library will have to be postponed, at least for the present. We give herewith the titles of the papers received up to the 25th ult., to be read at the forthcoming meeting:

Neurotomy in Traumatic Tetanus, by Burt, Paris; New Method of Removing Solid Adherent Ovarian Tumors, by Groves, Fergus; Bacilli of Phthisis, by Graham, Toronto; Hip Joint Disease, by Ferguson, Toronto; Cancer of the Larynx, by Ryerson, Toronto; Uses of Jaborandi, by McKay, Woodstock; Treatment of Falipes, by Burrows, Lindsay; Cases of Poisoning, by Mitchell, Enniskillen; Local Boards of Health, by Oldwright, Toronto; Aphasia, by Workman, Toronto; Primary Lateral Sclerosis, by Campbell, Seaforth;

Fatty Diarrhœa, by Woolverton, Hamilton; Medical Ethics, by Dupuis, Kingston; Anomalous Nervous Disease, by C. K. Clarke, Kingston; Value of Vaccination, by Playter, Toronto; Fractures of the Fore-arm, by McNaughton, Erin; Prurigo, with case, by McPhedran, Toronto; Acetonæmia, by Strange, Toronto; Translation on the new Microbes, by Covernton, Toronto.

These, with several others too late for mention here, together with the Reports, which this year promise to be very good, will form ample matter for discussion during the session.

SIMPSON'S BASILYST.



We herewith show the instruments used by Prof. Simpson, of Edinburgh, in the performance of what he terms basilysis, a description of which will be found in our last issue. Figure 1 shows the basilyst closed, as when it is being screwed into the bones. Figure 2 shows the instrument opened, as when the bones are being torn up. It does not cost more than the perforator in common use, and has the immense advantage that, whilst it as easily and effectively perforates the vault of the cranium, it can further break up the unyielding base, and thus in many cases render us independent of any further head-crushing implement or apparatus.

BEEF PEPTONOIDS.

This concentrated nutriment was first prominently brought to the attention of the medical profession in an article in the *New York Medical Record*, July 15th, 1882, entitled, "Feeding per Rectum," in which its value was tested in several cases, among which was that of the late President Garfield. In this case particularly, from the close attention bestowed by the physicians in charge to everything used for the sustenance of their distinguished patient, its excellence as a nutritive agent for feeding per rectum was most clearly marked,

while in the history of the other cases given, its value is exhibited when administered per orem.

This preparation contains all the soluble constituents of beef, *partially digested*, combined with gluten of wheat. The nutritive power of gluten is well known to be very great, for it has within itself such a variety of alimentary principles that animals are well nourished and can live indefinitely on it when taken as the sole article of food. Therefore it is plain, that combining this nutritive factor with the albuminoids and fibrinoids of beef, places within our reach a nourishment for feeding, per orem and per rectum, of considerable importance. Rectal alimentation has not heretofore received the attention it deserves, but there cannot be any doubt of its great value in many cases met with in the practice of every physician. In addition to the nutritive properties of beef peptonoids, it possesses sufficient peptone to materially assist the digestion of any food when administered at the same time, a fact that enhances its value considerably.

WILLIAM EDWARD SCOTT, M.D.

As we go to press we learn with deep regret of the death of Prof. W. E. Scott, of McGill Medical College. Dr. Scott was one of the most prominent physicians in Montreal, and has been connected with McGill College for upwards of thirty years. He held the professorship of anatomy for 15 years. During the last 26 years he held a prominent position on the attending staff of the Montreal General Hospital. He was born in London, England, and emigrated to Montreal at an early age. We are informed that he had a complication of diseases, but kidney disease was the principal affection. The disease appears to have run a rapid course. Many of our readers who attended the meeting of the Canada Medical Association in Toronto last year will remember his being present, apparently in good health. He bore his illness with becoming patience and looked forward to the end with great calmness. He took an active interest in all that pertained to the highest welfare of the medical profession. He was greatly respected by all who knew him, of a kind and generous disposition, a faithful friend, a loving father and devoted husband. His death will leave a blank not readily filled. Many who knew him intimately will mourn his loss as of a

true friend and brother. Large-hearted, frank and considerate, it may with truth be said "he was one of nature's noblemen." His family, consisting of his wife, three sons and a daughter, have our deepest sympathy in their great affliction.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the College of Physicians and Surgeons of Quebec was held in Montreal on the 9th ult., Dr. R. P. Howard in the chair. Dr. Henry H. Knox, of Portage du Fort, was the only successful candidate for professional examination. Seventy-seven candidates presented themselves for preliminary examination. The following are the names of the successful candidates: Messrs. H. A. Lafleur, E. H. Blackader, W. G. Stewart, A. W. Gardner, — Beique, W. Christie, R. Kirkpatrick, J. Langlois, G. C. Stephen, A. Couturier, A. Cowie, T. Mayrand, C. V. Poitras, J. F. Friganne, A. Guy, C. J. Edgar, J. Edge, J. G. Lamarche, P. Briere, L. J. A. Mignault, J. C. Mars, H. Marchand, J. B. Richard, T. C. Blondeau, C. A. Dugas, G. W. Lacombe, D. J. Page, E. Bittner, W. Joyal, L. Rochette, H. Garceau, A. Hudon, E. Lebreque, C. V. Marsil, J. Marchand, P. Pellard, P. Pelletier. This meeting is the last of the Board. A new election will take place in Quebec on the 11th of July next.

MONTREAL SCHOOL OF MEDICINE.—The following gentlemen belonging to this school received the degree of M.D. in Victoria University on the 11th ult.: — Prevost J. G., Chartrand J. P., Bigouesse J. A., Rioux J. F., Panneton E. F., Moll L. A., Chaffery J., Morency N., Simard E., Rohman H., Chagnon J. S., Vaillancourt R. L., Garrault S. J., Brien A. A. E., Ouimet A., Poitevin E. A., Salvail N., Etue A. Z., Theriault J., Clerk C. F., Mathieu H., Lacoursiere H., Craig L. C. S., Paquet E. G., Geoffrion J. Th., Largis H. E., Bastien J., Archambault H. A., Beaupre J. O. A., Prevost Gu. F., Goulet J. B. A., Allard O. H., Watier G. W., Peladeau J. Th., Brisebois J. M., Ledair E. A., Lessier C., Pepin J. A., Camiere L. J., Prudhomme R., Seguin A.

McGILL COLLEGE, MONTREAL.—The following are the changes and appointments that have been made in the above-named College: Dr. James Stewart, of Brucefield, Ont., has been appointed

Prof. of *Matéria Medica* and Therapeutics *vice* Dr. Wright, resigned. We congratulate both Dr. Stewart and the College upon this appointment. No better man could have been chosen for the position. Dr. D. C. McCallum has resigned the Chair of Obstetrics and Diseases of Women and Children, owing to press of other professional duties, and Dr. A. A. Browne has been appointed Prof. of Obstetrics, and Dr. W. Gardner Prof. of Gynæcology. Dr. Geo. Wilkins, of Bishop's Medical College, has been appointed Prof. of Medical Jurisprudence, and Dr. R. L. McDonnell Lecturer on Hygiene.

BISHOP'S MEDICAL COLLEGE.—The following changes and appointments have been made in this institution in addition to those mentioned in our last issue. A very important change has been made with regard to the teaching in anatomy, on which no systematic class lectures will be given in future. The entire teaching will be in the form of demonstrations, in the dissecting room. Dr. Trencholme has been appointed to the chair of Gynæcology; Dr. McConnell will lecture on *Materia Medica* and Botany, and Dr. H. L. Reddy on Therapeutics. Dr. Armstrong has been transferred to Physiology, and Dr. Foley to the chair of Anatomy. Dr. C. A. Wood has been transferred to the chair of Pathology, and Dr. Wm. Young has been appointed Prof. of Chemistry.

HALIFAX MEDICAL COLLEGE.—The following gentlemen have passed the final examination in this College: *M.D.*—J. A. Sponagle, G. H. Fulton, and D. N. Morrison. *Primary*.—A. N. Cogswell, F. W. Goodwin, A. C. Hawkins, J. W. Read, J. M. Gourley, J. McKenzie, T. C. Lockwood, and A. J. Weir. *Prizemen*.—Prize for best final examination, J. A. Sponagle; prize for best primary examination, F. W. Goodwin; Anatomy prize first year, A. J. Fuller.

OBSTRUCTION OF THE BOWELS.—Dr. J. D. Hunter, of Arequipa, Peru, reports in the *Practitioner* a case of obstruction of the bowels which was relieved by the introduction of the hand into the rectum. The hand was passed to the extent of sixteen inches, and the obstruction overcome by dilatation with the fingers. The patient made a rapid and continuous recovery.

TORONTO UNIVERSITY.—The following are the results of the recent medical examinations:—

First Year.—A. W. Bigelow, C. G. Campbell, J. C. Carlyle, W. P. Caven, W. J. Gregg, H. J. Hamilton, D. R. Johnston, H. E. R. Little, J. McCoon, J. Martey, D. McKenzie, C. T. Noeeter, S. G. Parker, J. W. Peaker, G. A. Peters, A. F. Woodward. *Second Year*.—H. Bascom, E. Bourke, A. Broadfoot, F. W. Kane, L. Carr, G. H. Carveth, G. A. Cherry, J. D. Courtenay, H. N. Hoople, J. H. Howell, A. B. Kinsley, C. A. Krick, D. J. Minchin, D. Pool, M. R. Saunders, D. M. Staebler, J. G. Sutherland, H. E. Webster. *Third Year*.—J. Bray, J. W. Clerk, J. S. Draper, R. Hearn, J. Johnston, A. F. McKenzie, J. W. Patterson, J. Spence, R. L. Stewart, S. Stewart, A. S. Thompson. *Primary*.—G. A. Bingham.

M.B.—H. S. Clerk, F. J. Dobson, J. E. Hensler, J. A. Meldrum, W. J. Robinson, W. H. Carlton, W. Cuthbertson, W. F. Freeman, W. J. Lepper, T. D. Meikle.

M.D.—R. E. Clapp. Scholarships and Medals. —*First Year*.—1, D. R. Johnston; 2, G. A. Peters. *Second Year*.—1, L. Carr; 2, H. N. Hoople. *Third Year*.—1, J. W. Clerk; 2, J. Spence. *Fourth Year*.—Gold medal (Univ.), W. J. Robinson; silver, F. J. Dobson; gold medal (Starr), W. J. Robinson.

NEW TEST FOR GLUCOSE.—Dr. Geo. Johnson in the *LANCET* for Nov. 18, gives his experience and experiments regarding a new test for grape sugar, whether in the urine or elsewhere. It consists in boiling with an excess of liquor potassa a specimen of diabetic urine (Moore's test), then, adding a few drops of a saturated solution of picric acid, which instantly changes the brown coloration to a deep purple color. The effect of the picric acid would seem to be to intensify the reaction between the caustic potash and the sugar.

CORROSIVE SUBLIMATE AS AN ANTISEPTIC.—In the number of the *Medical News* for May 5th, is an article by Dr. R. F. Weir, of New York, on the use of corrosive sublimate as an antiseptic. His attention was first drawn to it by a statement by Delacroix, that it was an effective germicide in the strength of one part to 2,500 parts of water, being 250 times more powerful than carbolic acid. He used it in one part to 2,000 of water and in some cases even stronger, with very satisfactory results.

ANÆSTHETIC MIXTURE.—In the CANADA LANCET for May, 1882, page 286, will be found a paragraph on the "dangers of anæsthesia," in which is given the mixture used by Dr. Henry Smith, of London. He claims that it is comparatively safe and equally as efficacious as any other. The mixture consists of one part of alcohol, two of chloroform and three of ether. It may be easily remembered from the circumstance that the initial letters of the substances are a.c.e., and the proportionate quantities are 1, 2, 3, respectively.

LIGATION OF THE INNOMINATA.—Mr. Mitchell Banks, of the Royal Infirmary, Liverpool, recently tied the innominate artery for aneurism of the second part of the subclavian artery. The common carotid was also ligated. Kangaroo tendons were employed as ligatures, and strict antiseptic precautions were carried out. The patient left the infirmary much improved. This is the twenty-third case in which the innominate has been tied; twenty-one of which were fatal.

RESORCIN AS A SUBSTITUTE FOR QUININE.—This new drug has been much written about lately, especially in Europe, and has come to be regarded as a most efficient substitute for quinine, in the treatment of intermittent fever. It is a substance closely allied to phenol, and is prepared by fusing potassium benzol disulphate with caustic potash. The dose is from thirty to forty grains. One special advantage of resorcin is its cheapness.

SKIN DISEASES.—Free clinics are given daily at the Hospital for Skin Diseases, Philadelphia, by Dr. Shoemaker, the physician in charge. A great number and variety of cases are treated at this hospital, and those who may desire to attend will gain a practical knowledge of these diseases, not obtainable in private practice. Physicians and advanced students are always welcome, either as visitors or for the purpose of attending the free clinics.

HEAVY BRAIN.—James H. Madden, the noted gambler, who died recently in Leadville, Colorado, had the heaviest brain ever weighed in the United States. Its weight was sixty-two and a quarter ounces. Cuvier's brain weighed rather more than 64 ounces; Dr. Abercrombie's 63. These are the heaviest on record.

BORAX AND GLYCERINE IN ERYSIPELAS.—In the *Medical Times* (Phila.), will be found an article on the treatment of erysipelas, in which the writer recommends the local application of borax dissolved in glycerine in the strength of one drachm to the ounce, and applied on linen. The writer speaks from an experience of eight years, and claims that it cuts short the disease in a remarkable manner.

THE LATEST REMEDY FOR CANCER.—Finely powdered ergot has been used with great benefit by Dr. W. A. Collins, (*Cin. Lancet and Clinic*) in all cancerous ulcerations. The powdered ergot is applied three times a day to the surface of the ulcer. After each application a muslin rag wet with carbolic acid lotion is applied. The Dr. claims to have had unlooked for results from its use.

DISGUIISING IODOFORM.—The *Western Medical Reporter* gives the following plan of disguising iodoform:—For patients who have to use iodoform for certain purposes, it is advised to spread some of the ointment on muslin and bandage a finger with it. Thus the purpose for which the agent is used can be concealed.

SODIUM HYPOSULPHITE IN FETID BRONCHITIS.—Dr. Lancereaux, (*Buil de Therap*) has drawn the attention of the profession to the value of the hyposulphite of sodium in the treatment of this fatal disease. He gives it in doses of from 60 to 80 grains daily. The fetid secretion is gradually diminished, the weight of the patient increases and a perfect cure is effected.

OVARIOTOMY IN AMERICA.—Dr. Burgess, of San Francisco, Cal., has had a series of fifteen successful cases of ovariectomy. This would seem to be an answer to the statement that, from climatic or other causes, the results in abdominal surgery on this continent are not as good as in England.

BRITISH MEDICAL BILL.—This bill, which has yet to pass the House of Commons, will not come into force until April, 1884. There is, therefore, ample time for those who desire to obtain British registration, to enable them to practise in Ontario, to do so.

CANADIANS ABROAD.—John Howard Betts, M.D., Kingston, has passed the examination of the Royal College of Surgeons, Eng., and was admitted a member on the 16th of April. H. W. Aikins, M.D., of Toronto School, F. G. Finley, M.D., of McGill College, and Drs. W. Nattress and W. H. McDonald, of Trinity Medical College, have passed the Primary examination of the Royal College of Surgeons, Eng.

BROMIDIA AS A HYPNOTIC.—Dr. Richard McSherry, Prof. of Principles and Practice of Medicine, University of Maryland, Baltimore, says: "I have used the preparation known as bromidia, prepared by Messrs. Battle & Co., of St. Louis, in my practice, and have found it a very satisfactory agent in cases for which it is deemed most appropriate."

APPOINTMENTS.—Prof. McLean, of Ann Arbor, has been appointed Surgeon-in-chief of the Michigan Central system of Railroads. Dr. J. M. Barnaby has been appointed member of the Board of Health for Bridgetown, N.S. Jas. Weir, M.D., of Kennetcook, has been appointed Commissioner of Schools for the district of East Hants, N.S. J. A. Sponagle, M.D., has been appointed House Surgeon of the Halifax Hospital, N.S. Drs. B. H. Scott and T. D. Meikle, of Trinity Medical School, and J. S. Draper and J. R. Patterson, of the Toronto School of Medicine, have been appointed assistants to the in-door Medical Staff of the Toronto General Hospital.

DR. SHEPHERD has been appointed on the indoor staff of the Montreal General Hospital, *vice* Dr. Wright, resigned, and Dr. McDonell on the outdoor staff. Drs. J. J. Gardner, W. G. Henry and J. Gray have been appointed on the resident staff.

DRS. J. Cameron and D. Chisholm of Port Hood, have been appointed members of the Board of Health for District No. 4, Co. Inverness, N.S.

WESTERN UNIVERSITY, MEDICAL DEPARTMENT.—The following changes and appointments have been made in connection with this medical college. Dr. Arnott has been appointed the representative of the school in the Ontario Medical Council. Dr. Wishart has been appointed Prof. of Clin. Surgery, Dr. McGuigan registrar, and Mr. W. Saunders secretary.

QUESTIONS AND ANSWERS.—In the September number of the LANCET page 20, it is stated that the injection of carbolic acid is good treatment for hemorrhoids if properly done. How should it be done? Ans.—The strength is one of carbolic acid to six of glycerine, and six of water; of this *five* minims are injected into each tumor at intervals of a week.

* * We received \$3 on the 4th ult., on account of subscription to the LANCET, but as neither name, date nor post-office address accompanied it, we are at a loss to know to whom we should credit the amount.

We regret to learn that both Dr. Purdy of Hope-well Corner, N.B., and his son who was attending the college at Mt. Allison, have been seriously ill of diphtheria, but we are pleased to know that they are in a fair way of recovering.

CORONERS.—Dr. D. E. Berryman has been appointed Coroner for St. John, N.B. Dr. A. B. Gaviller, of Luther, has been appointed Coroner for the Co. of Dufferin, Ont.

MEDICAL BARONET.—M. T. Spencer Wells, of London, Eng., the celebrated ovariologist, has been made a baronet.

Books and Pamphlets.

FORTIETH ANNUAL REPORT OF THE STATE LUNATIC ASYLUM AT UTICA, NEW YORK, FOR THE YEAR 1882.

This is decidedly the most able and instructive asylum report we have ever had the privilege of perusing. It is truly much to be regretted that the contents of such valuable public documents become so little known to the general public, or that, as a rule, the journalistic press so persistently abstains from reproduction of those portions which convey that sort of information which is most, and too often most lamentably, needed by a large proportion of every community. Insanity, just as religion and politics, would seem to be a subject on which every man, and not a small percentage of women, deem themselves perfectly competent, on all and sundry occasions, to dilate with nothing short of hierarchal authority; and whilst those best qualified by long experience and thorough study, to enunciate rational views, are always slow

and cautious in their decisions, the intuitively learned class never hesitate to pronounce their judgment on even the most obscure and perplexing cases.

The medical superintendent, John P. Gray, M.D., of the Utica Asylum, after a residence of 30 years among the insane, in which time more than 12,000 patients have passed under his observance in his own establishment, to say nothing of the ample opportunities availed of by him in his visitation of a multitude of other insane asylums in his own country and over a large extent of Europe, may surely be regarded as a person fairly qualified to express a well-matured and trustworthy opinion on the most important questions connected with asylum administration and the true interests of the insane; and assuredly his present report affords satisfactory proofs of his competency in these relations.

Most cheerfully, did our space or the recognized sphere of action of a medical journal warrant the indulgence, would we lay before our readers some of the more interesting passages of Dr. Gray's able production; but in truth these are so numerous as to render selection alike puzzling and justly impracticable. Above twenty pages are devoted to quotations from the evidence given before the committee of the Imperial Parliament in 1877, which was instructed to "inquire into the operation of the lunacy law so far as regards the security afforded by it against violations of personal liberty." When it is stated that the witnesses examined were Mr. Perceval, secretary of the Lunacy Commissioners; James Wilkes, Commissioner of Lunacy; Dr. J. Crichton Brown, Dr. John Bucknill, Sir James Coxe, Dr. Maudsley, Dr. D. Williams, and the Right Hon. the Earl of Shaftesbury, all gentlemen of the highest standing and most thorough experience, the public might rest assured that the opinions expressed were sound and practical, and they all concurred in the belief that the security of the personal liberty of Her Majesty's lieges needed no additional protection, and that the less the existing lunacy law was tinkered with the better. Lord Shaftesbury, in reply to the question, "Do you consider that the facility with which patients are admitted into asylums is not too great at the present time?" gave the following strong reply: "No, certainly not. I think that the whole of our experience confirms us in the opinion that it

is not. We stated so in 1859, and we state it still more emphatically now. I cannot recollect a single instance in which a patient has been brought into any asylum in whose case there were not sufficient grounds for saying that he was a proper subject for care and treatment; I can hardly recollect a single instance." Such decisive and clear language, from a man so eminent as the Earl of Shaftesbury, and after fifty years' experience as a lunacy commissioner, is surely entitled to very high consideration. We cannot refrain from another quotation which we regard as a very marked tribute of respect to the medical profession at large. His lordship being questioned as to the general merits of medical certificates of insanity, testified as follows:—

"It is very remarkable, taking it altogether, that the certificates have been so sound, considering the great number that have been given every year; of course we must admit that they have been signed by medical men who have no very extensive knowledge of lunacy, but it is certainly very remarkable that the number of certificates which have passed through our hands since 1859—the date of the last committee—amounts to more than 185,000, and yet of all those certificates, I do not think so many as half-a-dozen have been found defective."

We commend the above words of Lord Shaftesbury to the deferential consideration of that class of our Canadian sentimental philanthropists who find pleasure in detraction of the medical profession. From all we have been able to gather from intimate intercourse with the physicians of our asylums, we feel convinced that the general profession are entitled to the very same eulogium as that awarded by Lord Shaftesbury to our brethren in England. Certainly not on the side of loose awards of certificates of insanity is it that errors are most liable to occur, but on the contrary, on that of the withholding of them, in numerous instances in which they would have been not only justifiable, but also essential to the protection of the insane, and the safety of the community.

DISEASES OF THE SKIN, by James Nevins Hyde, Professor of Skin and Venereal Diseases, Rush Medical College, Chicago. Philadelphia: H. C. Lea's Son & Co. Toronto: Willing & Williamson.

This is a good book of 572 pages, on good paper

and in readable type. It is inscribed to Kaposi, of Vienna, which apprizes the reader of the fact that the author has travelled, and has studied his specialty under a competent instructor, who would appear to have given him very liberal permission to copy his plates. This is not the least of the excellencies of Dr. Hyde's volume. The book is written in good English, a fact which almost leads us to surmise that its author has spent long enough time outside the big pork market, to enable him to avoid almost all those peculiar idioms and words which, unfortunately, blemish too many of the literary productions of our western cousins, who seem every year, in point of both orthography and syntax, to be becoming more and more a law unto themselves.

When we inform our readers that Dr. H. has bestowed no less than sixty pages on Eczema, alone, they are not to conclude that he has given to it too much space. This is one of those most prevalent cutaneous affections which are sometimes equally puzzling and profitable to the practitioner, and if authors in general were to devote more attention to common every-day diseases, they would better meet the wants of the purchasers of their works, both in a professional and a pecuniary sense. As regards Eczema, it is pretty certain that the class of patients who call in medical attendants, are just those who are most able to pay, and whose purses indeed demand depletion; and this is as much as to say, buy Dr. Hyde's book. Some people may be inclined to find fault with the absence of coloring in the plates, which are 66 in number. We regard this want as no defect, but rather the contrary, for colored plates, in any department of medicine or surgery, are often more misleading than instructive. The student is too apt to be exactive on nature, and to demand uniformity of morbid aspects in all cases; whereas nothing is more rare than to meet with any two so closely resembling each other, or any one so closely resembling a captivating colored plate, as to render them readily, in all points, identifiable with any of the described or depicted forms he has studied in illustrated books. We have read a pretty large portion of this book, and we cannot withhold our expression of general satisfaction with the contents; but, dear me! Shakespeare said something "of all the ills that flesh is heir to"; had he read Dr. Hyde's book, he would not have written *flesh*, but

skin. Satan must have had a forecast of dermatology when he suggested the temptation of Job by asking leave to test him in this tissue; and he perhaps foresaw that his children would some day make a pile of money out of it; and who better than he understood the power of cash?

MANUAL OF GYNÆCOLOGY.—By D. Berry Hart, M.D., F.R.C.P.E., and A. H. Barbour, M.A., B., Sc., M.B. New York: Wm. Wood & Co.

The edition of this work before us forms part of Wood's Library of Standard Medical Books. It is a reprint of the Edinburgh edition and is in two volumes, being the monthly issue for the months of January and February of the current year. Beginning with a full account of the anatomy of the external organs and pelvic contents in the female, the relations of the several organs are carefully and fully dwelt upon. The several methods of examination of the uterus, manual and instrumental, are pointed out, with the various surgical appliances required in many cases of disease of that organ and its surroundings. The more common pelvic affections are fully entered upon, while those more rarely met with come in for a full share of notice. Affections of the Fallopian tubes, the ovaries, and the uterus, with the several displacements of the organ, and its many morbid conditions and growths, are treated of in a comprehensive manner. Vaginal and vulvar diseases are also described, although, of course, not at any very great length. The disturbances of the function of menstruation, and the various abnormalities of reproduction, are also noticed; and the second volume closes with a concise account of affections of the female bladder and rectum. An appendix is added to this volume, giving a good deal of information in regard to syphilis, chlorosis, and other important matters connected with case-taking. Altogether the book is a useful addition to any practitioner's library.

A MANUAL OF CHEMICAL ANALYSIS as applied to the examination of medical chemicals, for the use of pharmacists, physicians, students, etc. Third edition, thoroughly revised and greatly enlarged. By Frederick Hoffman, A.M., Ph.D., and Frederick B. Power, Ph.D. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

This work has been very much enlarged and improved in passing through the various editions,

and now contains about 600 pages. The senior author, Mr. Hoffman, is Public Analyst of the State of New York, and Mr. Power is Prof. of Analytical Chemistry in the Phil. Coll. of Pharmacy. The press work and binding are handsomely executed, and we believe the book will not disappoint the purchaser.

MANUAL OF HISTOLOGY, by Thomas E. Satterthwaite, M.D., Prof. Histolog. and Patholog. Anatomy in N. Y. Post Graduate Med. College, in connection with fifteen of the most capable physicians in the Atlantic States. Second edition, enlarged and revised, containing 202 illustrations and an appendix. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

It is only a short time since we received the first edition of this work. The issue of another edition within so short a period, shows the favor with which the work has been received by the profession. The present edition is a great improvement on the first, and is worthy of increased favor.

HANDBOOK OF THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT, NOSE AND NASOPHARYNX, by Carl Seiler, M.D. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

We have received the second edition of this excellent manual, which has been considerably enlarged. We can especially commend the chapters on nasal catarrh and tumors, as containing much useful information. The engravings are unexceptionably well executed; the style is clear and general get-up excellent.

HOW TO USE THE MICROSCOPE.—Intended for beginners. By John Phin, editor of the *Am. Journal of Microscopy*. Fifth edition, revised and greatly enlarged. New York: Industrial Publication Co.

The work before us will be found an excellent manual for students beginning the use of the microscope. A full description of the instrument and explicit directions are given with regard to its use. We would recommend the book to any one requiring a guide to the use of the microscope.

TRANSACTIONS OF THE THIRTY-SIXTH ANNUAL MEETING of the Ohio Medical Society, held at Columbus, O., June, 1881, and of the Thirty-seventh Annual Meeting in June, 1882.

STUDENT'S GUIDE TO DISEASES OF THE EYE, by Edward Nettleship, F.R.C.S. Second, revised and enlarged, edition. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

We have had occasion before to commend Mr. Nettleship's manual. It comes to us again considerably enlarged and with the addition of a chapter on Color Perception, by Dr. Thompson, of Philadelphia, and fifty new engravings.

ILLUSTRATED MEDICINE AND SURGERY, QUARTERLY, Vol. II., Nos. 1 & 2, edited by Drs. G. H. Fox and Fred. Sturgis, New York: E. B. Treat & Co., 757 Broadway. Price \$8 per annum.

This is a most excellent and useful publication, and cannot fail to become popular with the profession. It is deserving of the highest commendation and worthy of general support.

NOTE BOOK FOR CASES OF OVARIAN AND OTHER ABDOMINAL TUMORS.—By Wm. H. Hingston, M.D., D.C.L., L.R.C.S., Edin., Surgeon to Hotel-Dieu, Prof. of Clinical Surgery, Montreal School of Medicine; Consulting Surgeon to Woman's Hospital, &c., &c. Montreal: Dawson Brothers.

A HANDBOOK OF HOMEOPATHIC PRACTICE; By George M. Ockford, M.D., Member of the American Institute of Homeopathy. Chicago: Duncan Brothers. 1882.

HANDBOOK OF MEDICAL ELECTRICITY.—By A. M. Rosebrugh, M.D., Surgeon to the Toronto Eye and Ear Dispensary, &c., &c. Dudley & Burns, printers, Toronto.

Births, Marriages and Deaths.

On the 23rd ult., Dr. J. B. Gullen to Dr. Augusta H. Stowe, daughter of Dr. Emily H. Stowe, all of Toronto.

On the 16th April, James Bovell, aged 3 years; on 21st April, Minnie, aged 5 years and 5 months; and on 24th April, Nellie, aged 7 years; children of Dr. Wadsworth, Fox Lake, Wis., U. S.

At Newcastle, on the 30th of April, James A. Hunter, M.D., L.R.C.P. & S., Ed., aged 27 years.

On the 1st ult., Dr. Robert Eustace, of Canso, N. S., aged 47 years.

On the 6th ult., Dr. A. Chisholm, of Alexandria, Ont., aged 32 years.

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Original Communications.

PASTEUR ON THE ATTENUATION OF VIRUSES *

TRANSLATED BY C. W. COVERNTON, M.D., M.R.C.S.,
TORONTO.

The managing committee, aware that I had the intention of passing the holidays in the Jura, a short railway journey from your beautiful city of Geneva, have had the kindness to invite me to read a paper on the "Attenuation of Virus." I have accepted with readiness, happy to find myself, even for a short time, the guest of a people friendly to France in adversity as in prosperity. Besides I entertained the hope of meeting here with the opponents of my labors in recent years. If congresses are a ground fitted for drawing together and conciliation, they are in the same degree a fitting arena for courteous discussion. We are all animated with a high motive—the motive of progress and truth. You are aware, gentlemen, that our knowledge of viruses has been recently enriched by valuable discoveries which had their origin in the researches that I published in 1880 on the microbe of the disease termed chicken cholera. A virus, when it is represented or constituted by a microbe, may without any marked change in its general morphology be attenuated in its virulence, preserve this in culture, produce germs, and under its new state communicate a passing ailment capable of protecting from the mortal disease peculiar to the action of this virus in its natural state. This most valuable modification may be produced by a simple exposure of the virus to the oxygen of the air. This action of the oxygen is further variable with the temperature at which it operates and with the medium containing the virus and in which it has taken its origin. These facts, first established in

investigating the microbe of chicken cholera, have been extended since to the microbe of charbon or anthrax in a series of studies in which I had for my collaborators M. M. Chamberland and Roux. About the temperature of 16° , as also about that of 43° C. (temperatures which are near to those in which the culture of the bacillus is impossible), this bacillus no longer forms spores in the different broths of culture, fowl broth for example. Its exposure to the contact of the air at these temperatures, particularly at that of 42 and 43 , attenuates it progressively from day to day until it has eradicated from it all virulence and soon causes it to perish by rendering it unfit for any culture. The certain proof that it is to the oxygen of the air that we must attribute the attenuation of the microbe of chicken or fowl cholera has been established by a very simple method. It suffices to compare the effects of cultures where oxygen is excluded with those of similar cultures exposed to the influence of the air. These perish in a few months, having passed through different phases of attenuation; whilst the cultures protected from exposure to air in sealed tubes show themselves to be for this microbe very virulent after the lapse of several years. The peculiarities of the bacillus anthracis, or microbe of charbon, differ in many respects from those of the microbe of fowl cholera. The differences are that it lends itself much less easily than its congener to observations of the nature of which I have just spoken concerning the action of the oxygen. That is due to this circumstance, that the microbe of charbon under its form of filaments dies quickly in a tube sealed from the action of the air. The difficulty can be interpreted, and place still in evidence the influence of the air on the microbe of charbon, by the following artifice. Suppose, to fix the idea, that a broth is seeded, and that it is distributed in closed tubes subsequently placed at a temperature of 42° — 43° , and that they are dead in the tubes in six days, which may be easily proved in seeding every day one of the tubes. There is nothing to prevent your making with the culture of the fifth day, on the eve of the death of the closed tubes, a new culture equally protected from the air, which shall be in its turn at 42 — 43° . If the new culture dies also in six days, a third may be prepared which shall be distributed also in closed tubes, the seeding of which shall be taken from the culture of the

* Delivered before the Congress at Geneva, Sep. 6th, 1882.

fifth day, and so on in succession. At the same time that we are proceeding with this series of successive cultures *in vacuo*, we prepare parallel cultures in flasks in contact with the air. We will now compare the virulence of the closed tubes with the virulence of the cultures of the same days which have been exposed to the contact of the air. We have established that the virulence of the cultures exposed to the air has become more and more attenuated and cannot produce the death of the cobayes,* whilst those of the cultures in closed tubes kill. The action of the oxygen of the air in the attenuation of the anthrax or charbon microbe is then equally incontestable with that on the microbe of fowl cholera. The influence of oxygen for the attenuation of the microbe of charbon may be viewed also by a remarkable peculiarity. It is known that M. Toussaint has announced the attenuation of this microbe by the effect of heat alone, and that we can procure by this means vaccinal bacterides; but we have recognized that these bacterides do not preserve in their cultures their produced attenuation. Immediately the first culture of the blood is heated it again becomes virulent and deadly. The bacterides attenuated by oxygen, on the contrary, preserve their attenuation in the cultures. This difference has a greater importance and it is to it in part that we must attribute the difficulty of obtaining charbon vaccinations practically utilizable by the method of M. Toussaint. We do not at all hold the opinion recently advanced to the contrary by M. Chauveau in a note read at the Academy of Sciences. There is at any rate nothing in it the least reliable, sure or regular, whatever precaution may be taken, in the effect of heat on charbonized blood, even when exercised when very thin and at a fixed temperature.

The principal object of the communication that I have the honor to make to you is to furnish new examples of attenuation by the oxygen of the air, and to demonstrate that we have to do with a general method of attenuation of certain viruses. I commence with a microbe which is shown for the first time under circumstances as interesting as curious. I have again had as collaborators in the studies on which I am about addressing you M.M Chamberland and Roux, and in addition particularly M. Thullier. It is in their name equally with my own

that I speak. On the 10th of December, 1880, I was requested by Dr. Lannelongue, surgeon of the Hospital St. Eugène, to visit a poor child of five years seized with hydrophobia. She had been bitten on the face a month previously by a mad dog. Four hours after her death, which happened on the 11th of December, we inoculated two rabbits with mucus from the palate diluted with water. The rabbits died in less than 36 hours. In their blood we recognized a special microbe, cultivable in a state of purity, and from which successive cultures occasioned death to rabbits, their blood always having present the same microbe. The cadaveric lesions consisted in a partial dilatation of the venous system, in a swelling and wine lees redness of the ganglions of the groin, of the arm-pit and of the trachea. This is always hæmorrhagic. A little saliva moistens the lips and runs from their commissure. The lungs, generally œdematous, are sometimes hepatized. At the point of inoculation made under the skin of the bowels in the cellular tissue, this is slightly œdematous and emphysematous. In a trial, when we attempted to discover the moment of the appearance of the virulent organism in the blood, we perceived that nine hours after inoculation the seeded blood cultivated the microbe of the disease, without this being as yet visible by the microscope; but that twelve hours after inoculation it was perceived by the aid of the instrument. The fever appeared at the same time that the microbe was shown; death took place thirty-five hours after inoculation. The temperature only sank to 40° C. two hours before death. The animal weighed 1.920 kilo. at the time of inoculation, 1.730 kilo. at the moment of death, a diminution of 190 grammes in thirty-five hours. The saliva of rabbits dead transmits invariably the disease to other rabbits. Adult guinea-pigs support perfectly inoculation with this microbe, but it kills in two or three days cobayes of some days of age. In pursuing inoculations from cobayes to young cobayes, the virulence is exalted, and we easily arrive at killing cobayes at one, two, three and four months. With the first cobayes the cellular tissue around the point of inoculation shows œdema, bathed with bloody serosity, often thick and gelatiniform; the subjacent muscles are lardaceous, thickened, and purulent. It is remarkable that in proportion to the raising of the number of the

* Guinea pigs.

order of the animals inoculated, in successive inoculations the lesions change in character; the gelatinous degeneration of the cellular tissues, the purulence of the subjacent muscles disappear, to be replaced by a pronounced redness of these muscles. In these special conditions of exaltation of virulence, one would expect to see a cobaye die from acute septicæmia. The microscopic organism is found in abundance in the muscles, rarely, on the contrary, in the blood, and often in so small a quantity that it is not always visible to the microscope. There would seem to be a change of habitat of the microbe, in consequence of the augmentation of virulence. Here we have presented a circumstance worthy of interest; while the microbe has been augmented in virulence by passage through cobayes, it shows itself, on the contrary, less efficacious if it is reproduced in rabbits. This is not the only microbe which is thus characterized; we have made known the existence of this microbe to the Academy of Medicine in Paris, the 18th of January, 1881. We have seen then all the benefits that microby may render to etiological medicine. At the same time that we were making a study of this pathogenic microbe, Dr. Maurice Reynaud, of regrettable memory, equally devoted himself with Dr. Lannelongue to experimenting on rabbits with the saliva of the child seized with hydrophobia, as before mentioned, under observation at the Hospital of St. Eugène. Like us, he occasioned the death of the animals inoculated, but purely from a clinical point of observation; leaving aside the possible action of microbes that may have been introduced into the bodies of the rabbits at the same time with the rabic virus, he concluded that it was hydrophobia that he communicated to the rabbits. Until there is proof to the contrary, he said, we believe that it was from true hydrophobia that our rabbits died. M. Galtier has announced that he has transmitted hydrophobia from the dog to the rabbit, and has fixed upon eighteen days as the mean period of the incubation. The rabbits of Dr. Regnaud died much quicker, the mean of the duration between the instant of inoculation and death not being more than forty-five hours. This conclusion was not made as questioning the conclusion of Dr. Reynaud, as his experiences were derived from the transmission of hydrophobia, not from the dog, but from the human being, to the

rabbit; he attributed, therefore, the difference in the period of incubation to that circumstance. Previously, viz., on the 27th of October, 1879, M. Reynaud announced that he had, by inoculations of saliva, transmitted the hydrophobic disease in man to rabbits. This first conclusion was not more exact than that which I have now recorded. It is not that it may be very easy to communicate hydrophobia in man either to the dog or to the rabbit—we have often done it—but already at this time M. Reynaud had only had to deal, to his knowledge, with rabbits dead from this new microbe. Nevertheless, if the rapid death of rabbits in these varied experiments was due to an entirely new microbe, it may be asked whether this microbe had not some hidden relation with the true microbe of hydrophobia. Was it not a strange circumstance, this salivation in our rabbits, and the easy provocation of the disease and of death by their saliva inoculated into healthy rabbits? Besides, was it not very interesting to investigate whether we should find the same virulence in the saliva of the child who died from hydrophobia at St. Eugène, and in the saliva of other people labouring under the disease?

The occasion soon presented itself for clearing up doubt. On the 23rd of February, 1881, M. Percheron, a veterinary surgeon, pointed out to me a child, six years of age, presenting all the symptoms of hydrophobia; she also had been bitten, a month previously, in the face by a mad dog. Her death took place the same day, 23rd February, at four in the afternoon. The next day, on the 24th, a little of the salivary mucus was collected, with which two rabbits were inoculated, one in the cellular tissue of the abdomen by a Pravaz syringe, the other in the face by a lancet. The last presented no symptoms; the first died in three days. Its blood presented in abundance our new microbe with its habitual virulence. At the same time a journeyman blacksmith, aged 49 years, bitten by a mad dog four months and a half previously, died on the 22nd of February at the Hospital La Pitié, under the care of Dr. Brouardel. An hour and a half after his death several rabbits were inoculated with the saliva from his mouth and mucus from the palate. Other rabbits had already been inoculated by the saliva, but taken before death—some hours, and immediately before—by Drs. Brouardel and Beaumetz. Thanks to the kindness of

these enlightened physicians, I was enabled to assure myself that not only the rabbits that I had inoculated, but some of those from whom the virus had been taken, had died from the microbe we are now discussing.

An attentive and prolonged study of the effects of the inoculation of the rabic human saliva in rabbits, enables us to establish three kinds of death : 1st, death from the new microbe ; 2nd, death from abundant purulent disorders, with baring or separation of the skin, accidents of the septic order ; 3rd, death from madness peculiar to the rabbit. This last has always a very long incubation, and is characterized invariably by paralysis of the limbs, which lasts 24, 48 or 72 hours before death. The aptitude to bite never exists, so to speak, in the rabbit madness—at least I have only seen one instance in hundreds of cases. Death from purulent disorders may take place in a few days or in a few weeks ; in this case it is rare that paralysis exists. Death by the new microbe is always rapid unless there exist purulent complications, in which case death may be retarded for several days. To sum up, the saliva of individuals affected with canine madness contains, besides the rabic virus, not characterized as yet by a cultivable microbe, a virus formed by a special microbe that can be easily cultivated, and other microbes capable of producing death by exaggerated production of purulent matter, excessive local disorders, and sometimes of introduction into the blood of common microbes. In the saliva of children who died from hydrophobia the new microbe appears abundantly, and frequently sufficiently so to occasion the death of rabbits with greater rapidity than would be done by rabic virus, or by the microbes that are the occasion of purulent and putrid disorders. This new microbe discovered in the saliva of persons seized with hydrophobia, does it exist only in this sort of saliva ? This question naturally presents itself to our mind. It is even the first that must be solved if we seek to assure ourselves of a hidden relation between this microbe and canine madness. As to the case of the new microbe existing in other saliva, it is evident that it would be independent of the rabic virus. From the studies that we have devoted ourselves to, it has resulted that the saliva of adult persons, dying from diverse maladies, did not contain the new microbe, or rather that it has been masked in our experiences by the abundance

of microbes requisite for forming pus ; that, on the contrary, the saliva of children dying from diverse diseases has produced death to rabbits by the microbe that we are discussing, and that it has again been found in the saliva of persons in robust health. The new microbe then has no relation with the rabic virus. The microbe of saliva that I have been discussing is the third virulent microbe on which we have tried attenuation by the action of the oxygen of the air ; I desire to present it to you ; it is as yet unpublished, and very interesting on account of the diverse details of its history. You already know what happens to the cultures of the microbe of fowl cholera when we pass from one culture to that which follows, without placing between these cultures a long interval. The virulence of the second culture reproduces the virulence of the first without appreciable change, and it is the same with successive cultures. It is only when we allow a longer or a shorter time to elapse between two consecutive cultures, that we observe a diminution of virulence. In other words, it would appear that the oxygen of the air has only influence for attenuating a culture provided this is completed ; so long as the oxygen is employed for the life, for the acts of nutrition of the microbe, its attenuating influence is not exercised in any very sensible manner ; it is not entirely nil, but it escapes ordinary observation. Our microbe of the saliva behaves like the microbe of the cholera of fowls. If you make your cultures succeed each other from twelve to twelve hours you will find in all the cultures the same virulence ; that is to say, if we take the rabbit for a criterion of virulence, these animals die as quickly and promptly by the last cultures as by the first. M. Thullier had the patience to make, under these conditions, two series of eighty cultures, and the eightieth killed the rabbits as quickly as the first. To furnish the proof of differences it would have required the sacrifice of a very considerable number of rabbits, or to have operated on animals more refractory to the virus. If we now compare successive cultures, allowing them to remain a longer or a shorter time in contact with the air before passing from one to the other by seeding, the circumstances in some particulars are very different than for those of cholera of fowls ; the cultures die quickly. One is surprised to notice that in endeavouring to seed a culture in a fresh broth, most frequently after two or three days of waiting for the

mother culture, there is complete sterility, and the death of a culture occurs all the more rapidly in proportion to the high or low number. A culture seeded directly by the virulent blood lives six to twelve or fifteen days. If with this culture we seed a second culture, with that a third, and so on, we observe a prompt diminution of the duration of life and of the virulence of the cultures; the eighth would live three or four days, whilst the twelfth would live thirty hours, the twenty-fifth twenty-six hours, the forty-eighth and the following from about twenty-two to twenty hours. These cultures inoculated about the end of their life in rabbits do not always kill them, and it is easy then to determine that among rabbits inoculated under those conditions many will afterwards resist virulent inoculations. The disease does not then relapse, at least for a long time; nevertheless the rapidity with which the cultures die renders it very difficult to seize upon the precise moment when the seeding of the culture will give a reliable vaccination. It would be necessary to be able greatly to prolong the duration of the life of the cultures. We arrive at this easily on making a medium of the culture of broth with the blood of the rabbit. The broth most fitting for the culture of the microbe is veal broth. The broth from fowl, rabbit, beef and mutton is unsuitable. Two parts of veal broth and one part of pure blood of the rabbit give, by seeding with virulent blood or with a culture in broth of the same grade, cultures which have up to forty or fifty days of duration. In the last ten days of broth cultures seeded with this blood mixture, a series of graduated virulent cultures are formed, all vaccinal in different degrees. It is altogether the action of the oxygen of the air which modifies the culture and progressively attenuates the virulence. The proof is easy to give by the means I have already illustrated, that is to say, by a comparison of cultures made and preserved and kept in contact with air with those in closed tubes or *in vacuo*. Whilst a culture made and exposed to the air perishes in a few days in veal broth, the same culture made and kept in a closed tube or *in vacuo*, is still virulent after three or four months, perhaps longer. Besides, when death occurs in the closed tubes the virulence is preserved up to the moment of death.

We are thus in possession of three microbes that may be attenuated by the same method, which

contributes besides to the ready preparation of their vaccinal preventives—the microbe of fowl cholera, the microbe of anthrax or charbon, the microbe of saliva, particularly of the saliva of hydrophobics. If I add a fourth to this communication, I think that this new example will suffice to convince you, as I am myself convinced, that a general, rational method, in no ways an empirical one, of attenuating and of preparing many vaccinal antidotes has been found.

(To be continued.)

ON CANCER OF THE LARYNX.*

BY G. S. RYERSON, M.D., L.R.C.P.S., ED.,

Surgeon for Eye, Ear and Throat Diseases to the General Hospital and Hospital for Sick Children, Toronto.

I propose, in the following paper, to draw attention to some points of much practical interest in the diagnosis and treatment of malignant disease of the larynx. It has been my lot since commencing practice in Toronto to have had three such cases under observation, and I think that a brief relation of the facts of each case would make a pertinent preface to my remarks.

CASE I.—On Dec. 6, 1880, Mr. A., married, aged 57, an hotelkeeper, came to consult me with regard to a painful affection of the throat. He gave the following history: Father died, aged 49, of consumption; mother at 79, of old age. Three healthy living children; two died in infancy. No relatives on either side had any tumor or growth. He had always been in good health himself; was a moderate drinker and smoker. Had had no scald or injury of the part.

Nine months before coming to me he had a prickling sensation at the root of the tongue—no loss of voice. For last three months the voice has been getting husky; no difficulty in breathing. It came on, he said, after an attack of rheumatism. He is a spare man, and has lost flesh. There is no marked impairment of the general health—feels pretty well, in fact. Denies any specific taint. He has much pain in swallowing. The voice is indistinct, and it is painful to speak. No dyspepsia. Complains much of pain shooting up to the ears. Externally, two enlarged and indurated glands could be felt at the side of the thyro-hyoid mem-

*Read at the annual meeting of the Ontario Medical Association in Toronto, June, 1883.

brane. The base of the tongue seems thickened and hard. The tongue can only be protruded a short distance, and inclines to the left ; it has deep longitudinal furrows. There was not much of the interior of the larynx visible, owing to the drooping over of the epiglottis. Posterior portion of right vocal cord and arytenoid much thickened and reddened. Epiglottis greatly enlarged and hangs over to right, being red and smooth on lingual surface. On the left, a large, unhealthy-looking ulcer, with elevated, everted and sinuous margins. I do not know the ultimate history of this case ; I wrote, but received no answer.

CASE II.—This case I saw but once, on June 6th, 1881. It was that of a woman, æt. 67. The throat had been weak and inflamed for years. Had had considerable pain for last two years. Her speech had been affected for 18 months. There was much difficulty in swallowing for about the same length of time. At the time I saw her she had complete loss of voice ; was unable to protrude the tongue, and only able to open the mouth about an inch. Swallows with the greatest difficulty, only a teaspoonful at a time. She is literally a walking skeleton, having been formerly very stout. The glands were enlarged and indurated about the hyoid. Much thickening of the lower portion of the pharynx, larynx and base of the tongue. Bluish warty growths were to be seen on the base of the tongue. Larynx disorganised. No family tendency to tumors or growths. Her son informed me, two months later, of her death.

CASE III.—A year ago last January, J. P., a man of 51 years, felt as though something had lodged in his throat. He had slight cough, but no pain. There was gradual increase of difficulty of breathing until I was called to see him, on the 7th of May of last year. He had pain, extending up to the ears, and great dyspnoea. He was unable to lie down, was restless, and had a frequent, weak pulse. I had him removed to the hospital, where I performed tracheotomy, with immediate relief. Patient went off to sleep and slept for nearly twenty hours, awakening much refreshed. The operation I did was Boze's. He began to have difficulty of swallowing about the new year ; the voice began to fail about the same time. The glands in the neck were enlarged for about six months. He has considerable pain in the right shoulder. No family history of tumor. He is a moderate smoker, but,

occasionally, an immoderate drinker. No syphilis. General health fair, but is weak from want of food.

Laryngoscopic exam.—Epiglottis drawn down and to right ; difficult to see into larynx ; a rounded reddish-grey mass lies on right ventricular band—it is firm to the feel ; bluish-brown patches are to be seen at the base of the tongue as in Case 2. The growth has ulcerated ; there is some fetor of the breath, and almost complete loss of voice. The pain in swallowing has increased.

The diagnosis of cancer of the larynx must be made with the laryngoscope. The subjective symptoms, such as pain, dysphagia, dyspnoea, hoarseness, and fetor of breath, may be caused by other diseases. In two of my cases I have observed bluish-brown warty growths or nodules at the base of the tongue. They have appeared late in the disease and in groups on the tongue, and in Case 2 on the fauces as well. I have not seen any account of them in any work at my command. The differential diagnosis between cancer of the larynx and late syphilitic ulceration, particularly the gummatous form, is of considerable importance. I would tabulate them roughly thus :

CANCER.	SYPHILIS.
Age—After 45.	Before 45.
<i>Edge of Ulcer</i> — Defined, infiltrated, hard, everted, and often scalloped.	Less defined, may be excavated and sloughy, not infiltrated or everted ; reddened areola.
<i>Pain</i> — Pretty constant, darting up to ears.	Comparatively slight.
<i>Glands</i> — Submaxillary indurated and enlarged.	Same ; post-cervical also affected.
<i>Prognosis</i> — Steady, often rapid, resists treatment.	Slow, often stationary, amenable to treatment.
<i>Previous history</i> — Perhaps of irritation.	Chancre, eruptions, &c.
<i>General health</i> — Fair.	Often broken.

Some of these points are liable to considerable variation, as, for instance, in the matter of age. Cancer may occur before 45 and syphilitic ulceration long after that age. The progress, too, of syphilitic ulceration is often very rapid and resists treatment. In many cases iodide of potassium must be given before a definite conclusion can be arrived at. The laryngoscopic appearances vary with the stage. In the early stage they closely resemble those of gumma, and appear as a reddish-grey mass, situated most frequently on one or other

ventricular band, most frequently the right; the epiglottis is also a favorite locality. After ulceration begins the appearances presented are more characteristic. An ulcer with everted, indurated edges, greyish surface, without much depth, and attended by glandular enlargement, must always be regarded with great suspicion and anxiety.

Nearly all varieties of malignant growths attack the larynx, but epithelioma is by far the most common. The prognosis is naturally very grave. It is a curious fact that while cancer of the larynx is sometimes secondary, it rarely leads to secondary deposit in organs or parts other than in its immediate neighborhood. This is readily explainable by the sparsity of glandular or lymphatic connections with other parts. The very late failure of the general health may be explained in the same way. The duration of life with epithelioma is about eighteen months; with encephaloid, three years. Patients often perish suddenly from œdema of the glottis; but where life is prolonged, death occurs by apnœa; or where tracheotomy has been done, by exhaustion. The causation of cancer of the larynx is as obscure as that of cancer in other situations.

Treatment.—Relief from pain and discomfort, as well as a modification of the course of the disease, may be obtained by spraying the part twice a day with Dobell's solution, or by insufflating a powder containing morphia, gr. $\frac{1}{4}$; iodoform, gr. $\frac{1}{2}$, and a little starch. The powder is best suited to the stage of ulceration. I need hardly mention that everything should be done to keep up the general health. But I wish to lay particular stress upon the value of early tracheotomy. Fauvel, of Paris, tells us that it adds months and even years to the patient's life. In seven cases of encephaloid left to their own course, life lasted for three years; while in eight which were tracheotomized, the average duration of life was three years and nine months. In six cases of epithelioma left to their own course, the mean duration of life was one year and eleven months; while in seven other cases after tracheotomy, life lasted an average of four years. In Case 3 of my own short series, life has already been prolonged for a year, for there can be little doubt that he would have died long since had he not been operated upon. These facts are very striking and merit our earnest attention.

Thyrotomy can hardly be recommended, as the results have been very bad.

Extirpation of the larynx is an operation which has been practised, up to the year 1882, twenty-three times. Of the cases, sixteen were carcinoma, five sarcoma, one perichondritis with necrosis of the cartilages, and one lymphatic granuloma. Of the sixteen carcinoma cases, seven died as a result of the operation, and seven from a recurrence of the disease at from four to ten months after the operation. In one case the operation was entirely successful, and in that case the disease was confined to the box of the larynx, and the operation was done early. Of the five cases of sarcoma one died seven months later of asthenia, while the remaining case of granuloma was successful. Thus we find one case of malignant and five cases of non-malignant disease really cured by this operation. I think we may fairly consider these results brilliant. In all probability the non-malignant cases would have ended in death by apnœa had not this operation been performed.

I am strongly inclined to the opinion that when the disease is confined to the box of the larynx, and before any glandular structures are involved, the operation will prove a success even in malignant disease, and I think that an operation which can save six cases out of twenty-three from almost certain death may justly be regarded as "one of the greatest triumphs of modern surgery."

PRIMARY LATERAL SCLEROSIS.*

BY J. CAMPBELL, M.D., C.M., L.R.C.P., EDIN., ETC.,
SEAFORTH, ONT.

As primary sclerosis of the lateral columns of the spinal cord is a comparatively new and somewhat rare disease, and believing that I have such a case in my practice, I resolved to report the same, thinking that it would not be without interest to the members of this Association. As you are aware, we are beholden to the observations and investigations of Türck, Charcot, Erb and others, for our limited knowledge of this rare and interesting disease, Türck having given the result of his researches to the world in the year 1856, Charcot in 1865, Erb and others at more

* (The patient was exhibited and the paper read before the Ontario Medical Association, in Toronto, June 6, 1883.)

recent dates ; but there is still room for scientific research. We will simply report the following case, which we believe to be one of primary lateral sclerosis, and will then leave the subject entirely in your hands.

History.—H. B., æt. 36, is by occupation a farmer. He has been married six years ; the father of two children, one aged $4\frac{1}{2}$, the other $1\frac{1}{2}$ years. He was born in Prussia, but came to Canada 27 years ago ; has lived in the county of Huron, Ont., ever since. Has had no previous illness ; met with an accident 10 years ago by falling from a scaffold a distance of 12 feet, the small of the back striking on the edge of a board ; his back was sore for over a week afterwards. In the spring of 1882, while pulling a stick off a pile of wood, he felt a sharp pain in the small of his back. Has always been temperate in liquors ; has had a good appetite all his days. Family history good ; his father is healthy at the age of 65 years, mother 62 years of age and healthy ; one sister died in infancy, the rest are healthy. He is 5 feet 10 inches in height, his average weight being 170 lbs. ; his present weight is 160 lbs. He has moderately broad shoulders, with a somewhat flat breast. His temperament is a mixture of the sanguine and nervous, with a trace of the bilious ; his complexion is fair. He has a somewhat awkward shuffling gait. Has always been a hard worker, and a good deal exposed to wet and cold. Says he has been moderate in venery, and since his illness began has been very cautious in this respect. Says that he cannot stand the cold.

Present Illness.—In July, 1882, his wife noticed him twitching in his sleep, and repeatedly awoke him, as she felt alarmed about it. He applied for treatment on the 23rd of Oct., as he felt weak, and was somewhat anxious, as well as annoyed, on account of the twitching continuing. His appetite had now begun to fail. Upon examination found tenderness moderately well marked over the third dorsal and last lumbar vertebræ. The application of hot and cold sponges gave negative results ; electrical contractility appeared to be normal. He had slight symptoms of paresis in the lower limbs, and was easily tired by either standing or walking for any length of time. He also complained of weakness in the upper extremities when he attempted to do any work. When he walked he shuffled his feet along instead of lifting

them lightly from the ground. When his eyes were closed he did not stagger, and presented no symptoms of ataxia. The nutrition of the muscles did not appear to suffer to any appreciable extent ; sensibility was normal. Reflex excitability of the skin was only slightly increased ; the tendon reflexes were greatly exaggerated. The functions of the brain, bladder, and rectum were normal ; sexual power was neither increased nor diminished. The most prominent and continuous symptoms were the spasmodic twitchings, spasms, and tremors of the muscles of the legs, and sometimes of those of the abdomen and thorax. These were worse after exertion and excitement, but sometimes occurred after sudden passive movements as well—or even after no movements at all, as during sleep, when the patient would be awakened by them. From the 23rd of Oct. until the middle of Nov., the patient was on Ext. ergot, fld. m. XX. three times a day, with tonics occasionally, as Ferr. et quin. cit. ; also lactopeptine and other remedies to aid the digestive powers. At the same time we recommended a good, substantial, unstimulating diet, with passive exercise in the open air, sponging of the body, followed by friction, and hygienic measures generally. Hot baths to the spine were also recommended, but the suggestion was never acted upon. By the middle of Nov. he was so much improved that he helped his brother to box in a drain. Whether from the cold and wet incident to this occupation or not, he got worse after this, and, as he felt discouraged, the advice of my friend, Dr. Gunn, of Brucefield, was obtained. Dr. Gunn agreed with me as to the nature of the disease, and after consultation, we resolved to put him upon a mixture containing Potass. brom., potass. iodid. and hydrarg. bichlor., with a bitter tincture. This was varied sometimes by substituting Tr. digitalis for calumba or gentian. The doses of the principal ingredients were also increased or diminished from time to time, as the symptoms seem to indicate. After this he greatly improved for a time, but afterwards relapsed, when he would be one week better and another worse ; but on the whole his appetite was rather poor, which told on his general strength. The twitching of the muscles was what alarmed him most ; when this was allayed, as it was under the influence of the medicine, he felt better ; when it returned he felt worse.

About the 20th of April he sought the advice of Dr. Fulton, of Toronto, to whom I addressed a note, stating what my diagnosis was. At the time of his departure for the city he felt somewhat better than he had done at any period during the winter, and consequently felt inclined to delay his visit; but, as I was by no means buoyant as to the future, I urged him to go. Dr. Fulton, after a thorough examination of the patient, verified my diagnosis, as Dr. Gunn had previously done. He recommended that he should be put upon Ext. ergot. fld. ʒ i., three times a day, which was done. The result of this treatment, so far as I could discern, was favorable for the space of one month, after which time the twitching began to get worse, and has been getting gradually stronger for the last two weeks. As a rule he sleeps pretty well, but on the evening of the 4th inst. he was awakened by the twitching, which begins below the knees and works upward, to use his own words, until it gets into the body, where he says he feels it shaking the liquid in his stomach. On the evening referred to he says he felt trembling or shaking in the soles of his feet, "just like lightning"—undoubtedly a rhythmical tremor—but it only lasted about two minutes. He does not feel like attempting any work; his appetite, which had improved during the month that he was on the mend, is again impaired. The patient is under close observation, and the progress of the case, either for better or for worse, will be watched by us with that interest which the nature and importance of the disease deserve.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The third annual meeting of this Association was held in Toronto on the 6th and 7th inst. The attendance of members was fairly good. Dr. J. E. White, Secretary, read the minutes of the last meeting.

A communication was received from Dr. MacDonald, the President, stating that owing to indisposition he would be unable to attend that day. Dr. Richardson, of Toronto, was therefore voted into the chair.

The remainder of the morning's session was

spent in receiving the reports of the Committees on Arrangements, Credentials and Papers and Business.

In the afternoon the chair was occupied by Dr. D. Clark, Vice-President.

Dr. Burt, of Paris, exhibited a patient treated for traumatic tetanus by neurotomy.

Dr. Campbell, of Seaforth, exhibited a case of primary lateral sclerosis.

Dr. McKay, of Woodstock, read a paper on the "Use of Jaborandi." He strongly approved of its use in cases of tonsillitis, asthma, scarlet fever, measles, pneumonia, and common colds.

A long discussion ensued, in the course of which the opinion was elicited that the remedy required to be administered with great caution, owing to its tendency to act on the heart and to produce salivation.

Dr. Covernton said that he had given the drug in tonsillitis, but combined with aconite. Benefit had resulted from the treatment.

Dr. Burrows, of Lindsay, read a paper on the "Plaster Wedge in Talipes;" Dr. Wolverton one on "Fatty Diarrhea;" Dr. Groves, of Fergus, on the removal of an ovarian tumor, and Dr. McNaughton on "Fracture of the Forearm," the latter exhibiting a new splint which restored the radial curve of the arm.

Dr. Clarke, of Kingston, read a paper on "Anomalous Cases of Nervous Disease," and gave a history of one of supposed hystero-epilepsy, which had been successfully treated with carbonate of iron.

Dr. Workman read a paper on "Aphasia."

In the evening Dr. Graham, Toronto, read a paper on "Bacilli Tuberculosis," in which he argued that the position taken by Koch on this subject had been strengthened by the investigations of other pathologists. The questions they as physicians were interested in were: (1.) Can phthisis be diagnosed by means of the presence of bacilli in the sputa? (2.) Has the number of bacilli any relation to the prognosis? (3.) Has the discovery aided us to any extent in the prevention and treatment of this formidable disease? Investigations led to an affirmative answer to the first question. The experiments made by several prominent Berlin physicians showed that bacilli were found in the sputa of patients suffering from phthisis, but they were not found in cases of bronchitis. The general opinion of the London medi-

cal faculty was that bacilli were found in cases of tuberculosis, and in that disease alone, and that they varied in number in proportion to the severity of the disease. The doctor then gave the results of the examination of the sputa of forty patients which he had examined. The conclusions arrived at by the doctor from the experiments were :—(1.) That bacilli are found in the sputa of almost, if not all, cases of phthisis ; it was doubtful if there was any case of active disease in which bacilli would not be found, provided the sputa came from the lungs, and five or six examinations were made. (2.) They were found on the first examination in three-quarters of the cases. (3.) The presence of the bacilli is a positive evidence of the disease. (4.) There are doubtful cases in which the examination of the sputa for the bacilli will be of decided value in arriving at a correct diagnosis. (5.) As to prognosis, it was found that the number was in proportion to the amount and rapidity of the process of destruction. (6.) It might be said as a general rule that in the more chronic cases bacilli were fewer and, he thought, smaller. His experience convinced him of the contagiousness of the disease, of which he gave instances.

Considerable discussion followed the reading of the paper, after which Dr. Strange read a paper on "Acetonæmia," and an adjournment was made till the following day.

SECOND DAY.

The Association met at 10.30 a.m., Dr. Clark in the chair in the absence of the President, Dr. Macdonald.

The Secretary read a report by Dr. Battersby, of Port Dover, on a case of "Umbilical Hernia and the Formation of an Artificial Anus."

Dr. Mitchell gave an account of three cases of poisoning which he had recently treated. The first patient had swallowed a large dessert-spoonful of pure carbolic acid. The second patient had taken half a teacupful of Paris green. The third case was one where several persons had taken an infusion of some herb, supposed to be belladonna. The treatment was by sharp emetics and sub-cutaneous injections of morphia and of brandy, with the use of the stomach pump. In the first instance he administered olive oil and sulphate of zinc, and the patient recovered ; the other two cases proved fatal.

At this stage of the proceedings Dr. Macdonald, of Hamilton, the President, entered the room, and amid applause took his seat. He explained that his absence the previous day had been caused by indisposition. He then delivered his annual address. He enumerated the advantages to be derived from the meetings of the Association, both from a social and professional point of view. Ontario being a large province, the members of the Association suffered from isolation, and the reunion brought about by the meetings of the Association tended to bring the members of the profession, who lived at a distance from one another, into closer social relations, and to aid much in removing the feeling of distrust that was supposed to exist in their ranks. The Association also was intended to fill the gap between the Dominion Association and the local organizations of the town and country. He thought that London and Kingston should be visited every year alternately with Toronto by the Association, as such a course would extend the benefits derived from their meetings over the province. He then referred to the question of the attitude to be assumed by the members of the profession towards the homœopathsists in consultation. There was not that hostile feeling towards the disciples of Hahnemann in Canada that was felt in the United States, a result owing probably to the terms on which homœopathsists were received by the Council of the College of Physicians and Surgeons. But, although there was no hostility, there was no change in the opinion in which the doctrines of Hahnemann were regarded by allopaths. He thought they should do nothing that would throw obstacles in the way of others giving professional aid in cases of urgency where homœopathsists were in attendance. He alluded incidentally to the museum proposed to be started by the Association, and mentioned the advantages which would result from such an institution. He had no doubt that the College of Physicians and Surgeons would find the room required for such a museum if it were started. He went on to refer to the communication of the Ontario Christian Women's Temperance Association, in which they asked that the profession should abstain from prescribing alcohol as a therapeutic agent. There was a great difference of opinion as to the value of alcohol as a medicinal agent, and the profession could not, of course, be expected to give an opinion contrary to

their convictions. They all sought, however, to promote among the people habits of sobriety, and would do all in their power to aid the temperance organizations in this object.

Dr. Radford, of Galt, showed a patient suffering from chorea, which he had treated without success by the ordinary method. He asked the opinion of the Association.

Dr. Harvey recommended cod-liver oil, maltine, bathing with a solution of Atlantic salt, and friction.

Dr. Zimmerman recommended circumcision if phymosis existed.

Dr. McPhedran presented a case of prurigo which he is treating successfully at present with pilocarpin.

Dr. Ryerson, of Toronto, read a paper on "Cancer of the Larynx," which will be found on another page of this issue.

Dr. Ferguson, of Toronto, read a paper on "Hip-joint Disease."

Dr. Davidson, of Toronto, described what he considered to be a case of superfœtation. The patient was delivered of a fœtus about four months old, and another of four weeks old. The catamenia never ceased during pregnancy. There were no signs of decomposition on the fœtus four weeks old.

Drs. Cameron and Oldright dissented from the opinion of Dr. Davidson.

The President, Dr. Macdonald, said that the absence of putrefaction was a very strong point in favor of Dr. Davidson's position.

Dr. Cassidy read a paper on "Enteric Fever," which he illustrated by specimens.

Dr. Oldright presented the report of the Committee on Public Health. The report drew attention to the increased public interest in the subject, and recommended that the Government should be petitioned to pass an Act making it compulsory on all municipalities to have a local board of health with a medical health officer. Also, that steps should be taken to provide for more efficient instruction in the public schools on the subject of hygiene. An advance copy on the subject of sewage disposal, issued by the Provincial Board of Health, was submitted.

With regard to a communication received from Mrs. Chisholm, President of the Ontario Women's Christian Association, Dr. Oldright regretted that the time at the disposal of the committee had been too short to return a full report. The Committee,

however, felt free to state that in general the use of intoxicating liquors by healthy persons is injurious, and also that the profession believe that disease is very often due to the use of liquors, and that there is a general feeling that attempts should be made to bring about a more restricted use of alcohol.

The report was adopted with the exception of the clause on temperance, which was referred to a committee consisting of Drs. Barrett, Buchan, Workman, George Wright, and Playter, with instructions to report at the next meeting of the Association.

A resolution was also adopted embodying the recommendation of the committee respecting the establishment of municipal boards of health.

The report of the Committee on Medical Ethics was presented, but there being no time for its discussion, it was referred back to the committee with instructions to bring in a more definite report at the next meeting.

The report of the Committee on Surgery was read by Dr. Oldright, and adopted. It dealt especially with the subjects of recent wounds, the reduction of dislocations, the germ theory of disease, the physiology and pathology of the blood, anti-sepsis and drainage.

The report on Medicine was taken as read.

The Hon. Alex. Morris, M.P.P., who had entered the room a few moments previously, was here invited to the platform by the President, and delivered a short address, in which he referred to the noble and elevating character of the profession of medicine.

The reports on Obstetrics and on Necrology were not forthcoming. The Audit Committee reported verbally that they had examined the Treasurer's books and found them correct.

The Committee on Nominations reported, recommending the following elections for the ensuing year. The report was adopted.

President, Dr. D. Clark, Toronto; 1st Vice-President, Dr. Worthington, Clinton; 2nd Vice-President, Dr. Philp, Brantford; 3rd Vice-President, Dr. Richardson, Toronto; 4th Vice-President, Dr. McGill, Oshawa; Recording Secretary, Dr. White, Toronto; Treasurer, Dr. Graham, Toronto; Corresponding Secretaries, Dr. Graham, Brussels; Dr. McKay, Woodstock; Dr. Cameron, Toronto; Dr. Aylesworth, Collingwood.

The following were added to the Standing Committees :

Credentials, Dr. Davidson, Toronto ; Public Health, Dr. Carney, Windsor ; Legislation, Dr. Digby, Brantford ; By-laws, Dr. C. K. Clarke, Kingston ; Medical Ethics, Dr. Campbell, Seaforth ; Nominations, Dr. Buchan, Toronto.

The report on Ophthalmology and Otology was taken as read.

The President and Secretary were requested by the Association to memorialize the Medical Council on the subject of a Provincial Medical Museum, and to bring the matter before the Government.

It was decided that the next annual convention of the Association should be held at Hamilton. The meeting then adjourned *sine die* after passing the usual resolutions of thanks and voting the customary honorarium to the Secretary.

In the evening the Association held a conversatione, the Royal Academy having placed their exhibition rooms at the disposal of the Association. Between seven and eight hundred people were present. A brief address was delivered by Dr. D. Clark, the President-elect.

Interesting exhibits of pharmaceutical preparations were presented by Messrs. Parke, Davis & Co., Detroit, Mich. ; Maltine and Beef Peptonoids by Mr. Gisborne, representing Reed & Carnrick, of New York ; and fluid extracts, &c., by E. B. Shuttleworth, of Toronto. A variety of surgical instruments were also shown by Messrs. Stevens & Son, and E. A. Smith & Co., Toronto.

ONTARIO MEDICAL COUNCIL.

The regular annual meeting of the Medical Council of the College of Physicians and Surgeons of Ontario was opened in Toronto on the 12th ult., the President, Dr. Bray, of Chatham, in the chair.

The election of officers was proceeded with, with the following result :—President, Dr. Logan, Ottawa ; Vice-President, Dr. Day, Trenton ; Registrar, Dr. Pyne ; Treasurer, Dr. Aikins ; Solicitor, Dalton McCarthy, Q.C.

Drs. Burns, Day, and Edwards were appointed a committee on credentials. The committee reported as to the correctness of the certificates of Drs. Campbell and Fenwick.

The following standing committees were appointed :—

Registration—Drs. Rosebrugh, Bergin, J. W. Wright, Vernon, Fenwick, and Grant.

Rules and Regulations—Drs. Spragge, Rosebrugh, J. W. Wright, Grant, and Campbell.

Finance—Drs. Edwards, Allison, McCargow, Day, Henderson, and Douglas.

Printing—Drs. McCammon, Day, Vernon, Burritt and Campbell.

Education—Drs. Lavell, Geikie, McCammon, H. H. Wright, Edwards, Burritt, Husband, Spragge, Williams, Bray, Burns, and Cranston.

Dr. Bray, the retiring President, then read his valedictory, in which he gave a *résumé* of the business that had officially come under his notice during the past year. He had granted stay of proceedings in only three cases. The first was that of a British graduate who had neglected to register while in Europe ; the second, that of a gentleman who failed in two unimportant subjects last year. The information was laid in February, and as he promised to go up in April for his examination, a stay was granted. Since that time he has passed, and is now registered. The third case was that of a Provincial Licentiate who was informed against for using the letters M. D. after his name, and as he was a regular practitioner of many years' standing, and had a perfect right to practice, a stay was granted. He stated he had been applied to in other cases, but refused to interfere. Several applications for permits to practice were refused. With regard to the cases of young men who had failed to pass on certain subjects, and who were absolutely required to work for a living, he suggested that the representative of that division in the Council should be allowed to deal with them. He also suggested that the curriculum for matriculation should be changed. He believed that so long as the Universities accepted the matriculation of a student any time before graduating, the Council should do the same, provided the four-year course had been complied with. As the New British Medical Act was both liberal and comprehensive and proposes reciprocity, he thought that the profession in Ontario, who were the pioneers in raising the standard of medical education on this continent, should agitate for a uniform bill for all the provinces whereby the standard would be the same, so that a man having passed the Coun-

cil of one province could register in another by merely paying the fee. He suggested also that the examinations should be still more practical, which could best be done by having the examiners appointed for five instead of two years.

Mr. Dalton McCarthy's opinion relating to the representation of certain educational institutions in this Province in the Council was next read. It contended that the Western University of London, Ont., was entitled to a representative, and that "Albert College," "College of Regiopolis," Kingston, and the College of Ottawa were not entitled to representation.

The opinion was briefly discussed and was referred to a special committee composed of Drs. Day, Williams and Burritt.

A number of communications and petitions were read and referred to committees.

The Finance Committee reported that the Council property on the corner of Bay and Richmond streets had been valued at \$14,951, and was now offered for sale.

The meeting then adjourned till ten o'clock the following morning.

June 13th, 1883.

The Council met at 10 a.m., the President in the chair.

Dr. Edwards gave notice that he would move, "That on and after June, 1884, every student who presents himself for the final examination must show himself proficient in case-taking."

Dr. H. H. Wright gave notice of a resolution making a summer session compulsory. It was referred to a committee.

Dr. Bray moved the following amendment to the Council regulations, which was considered in committee, reported, and adopted by the Council:—"The annual meeting of the Council shall take place on the second Tuesday of June of each year at Toronto, when the President, or, in his absence, the Vice-President, shall take the chair, until the Committee on Credentials shall have been appointed and reported, and another President shall have been elected."

Dr. Wright's motion for a summer course, and Dr. Edwards' resolution respecting "case-taking," were discussed and submitted to the Committee on Education. During the discussion on the latter, Dr. Geikie pointed out that in the schools in

Toronto every possible effort was being made to secure the teaching spoken of. Dr. Allison advocated cautious action and thorough investigation before adopting a compulsory change of this kind.

Dr. Edwards moved, seconded by Dr. Vernon, that a public prosecutor be appointed for the Council. He referred to the difficulty of prosecuting by the district authorities, inasmuch as they could not proceed quickly enough to procure the arrest of itinerant illegal practitioners.

Dr. Bray favored the appointment of individual prosecutors in each division.

Dr. Allison favored the appointment of one chief prosecutor, with subordinates, and that all the fines go to the informant, the Council not to meet any costs.

Dr. Lavell contended that the Council was not a detective bureau. He thought that if the standard of the profession was raised as steadily as in the past there would be no need of any public prosecutors, and he opposed any such appointments. In reference to the cases of qualified medical men who allowed themselves to be bought up by quacks, he believed that steps should be taken to urge the universities to take away the degrees of such graduates as would thus disgrace their Alma Mater.

Dr. McCammon was opposed to the appointment of a public prosecutor, as until they got a clause added to their Act empowering them to annul the degrees of such registered medical men, no prosecutor would be able to stamp out quackery.

Dr. Geikie thought that perhaps some of the laws might be brought to bear on those people who were, so to say, medical peddlers, who levied blackmail on the public. He thought that outside of these people there were very few quacks in the land compared with parts of the United States.

Dr. Burns thought the Council could not be expected to act as detectives, but that the duty of the Council was to protect legitimate practitioners.

Dr. Grant thought the Government should be asked to place a special tax upon each quack advertisement inserted in the press, and this would be an effective way of putting an end to quack literature. He favoured the appointment of a prosecutor in each section, who would act under instructions from the representative of the Council.

Dr. Burritt opposed the appointment of a public prosecutor.

Dr. Day stated that in the State of Illinois the Medical Board was empowered to annul the license of doctors engaged in unprofessional business. They should take means to obtain similar powers from the Ontario Legislature.

The motion was then submitted and lost.

Dr. Burns gave notice of a motion to change the mode of electing the territorial representatives in the Council.

The Treasurer, Dr. Aikins, presented his annual report, which showed the following:—Receipts from examination fees, \$3,145; registration fees, \$1,642; assessments, \$791; rent of hall, \$25; fines on unlicensed practitioners, \$255; balance in hand, June, 1882, \$1,568; total, \$7,426. The balance now in bank to the credit of the Council, after deducting all expenditures for the last fiscal year, is \$2,163.98. About \$5,000 were due from unpaid assessments. The balance in hand was not sufficient to pay for the expenses of the present session and accounts due. For some years past no payments had been made on the hall. In order to meet prospective outlay it was necessary that steps be taken to enforce the payment of all outstanding assessment fees. The report was referred to the Finance Committee, and subsequently adopted.

The Council then adjourned till ten a.m. tomorrow.

June 14, 1883.

The Council met at 10 a.m. After routine, a discussion arose on the subject of needful amendments to the Medical Act. A motion by Dr. Allison was adopted, ordering the re-appointment of last year's Legislation Committee, with instructions to consider and draft such amendments as may be considered necessary, and to report to the Council next year.

Dr. Edwards presented the report of the Finance Committee, which was adopted. The total assets of the Council are \$25,481, including annual dues uncollected, \$5,318, and buildings and grounds, \$18,000. On the building there is a mortgage of \$6,000. The expenses of the present Council are \$1,300.

Dr. Rosebrugh read the report of the Registration Committee, which was adopted. Several applications for registration were refused.

Dr. Lavell presented the report of the Education

Committee. Most of the petitions from students, including several for supplementary examinations, were refused. Dr. Edwards' resolution concerning clinical "case-taking" was considered, and while the committee appreciated the importance of the suggestions, they recommended no action at present. Dr. Wright's resolution anent a summer session was considered, and the committee, while fully appreciating its desirability, and the relief its establishment would afford to the excessive work of the winter courses, deemed it inadvisable to give it definite shape. The following committee was recommended to review during the recess the curriculum of study endorsed by the Council:—Drs. Fenwick, Lavell, Macdonald, Bray, Bergin, Cranston, and Logan, the travelling expenses of the committee to be paid by the Council.

During the discussion of this subject, Dr. Geikie moved that the report be amended by adding a clause to the effect that the said committee were merely suggestive, it being the fixed policy of the Council not to make any changes in the present excellent curriculum which were not imperatively called for, and that every suggested change should be well and carefully considered before being adopted. The amendment was lost.

The Board of Examiners for 1883-84 is as follows:—Anatomy, descriptive, Dr. J. Fulton, Toronto; Medicine and Pathology, Dr. A. S. Oliver, Kingston; Midwifery, Dr. B. E. Burdett, Belleville; Physiology, Dr. G. A. Tye, Chatham; Surgery, Dr. W. Canniff, Toronto; Chemistry and Toxicology, Dr. M. Barrett, Toronto; Materia Medica and Botany, Dr. W. Dickson, Pembroke; Medical Jurisprudence and Sanitary Science, Dr. W. Nichol, Brantford; Homœopathic Examiner, Dr. C. W. Clark, Aylmer; Medical and Surgical Anatomy, Dr. Eccles, London.

Dr. Day submitted the report of the Committee on Legislation, with regard to the right of certain members to sit at the Council. The Committee had received from the representatives of Albert College, Belleville, and the Ottawa University, sufficient proof of the right of those institutions to representation. Nothing was adduced concerning Regiopolis College. The report was adopted.

The following were appointed as an Executive Committee:—The President, Vice-President, and Dr. Bray.

The Registrar was ordered to address circulars to all practitioners in arrears, to the effect that unless the amount due by them be paid within three months, legal action will be taken.

After passing resolutions of condolence with the families of departed members, and of thanks to the president and officers, and also adopting an address to be presented to the Governor-General and Princess Louise, the Council adjourned.

ONTARIO BRANCH MEDICAL ASSOCIATION.

The semi-annual meeting of the North-Western Branch of the Ontario Medical Association was held in Palmerston on the 21st of February.

Dr. Dingman of Listowel reported a case of gangrene which followed tapping a hydrocele. No injection was used; patient was 53 years of age. Twenty-four hours after tapping, found him partially unconscious and apparently suffering severe pain. Temperature 101° ; scrotum and penis oedematous. From this point the gangrene spread upwards as far as the left nipple, and half way down the thighs on both sides. Notwithstanding all that could be done he died four days after the operation.

Dr. Graham of Brussels presented a typical case of progressive muscular atrophy. J. W., a farmer, aged 52. Has been healthy up to present attack. Never received any injury excepting a fall from a hay-loft five years ago. Has not had typhoid fever or rheumatism; no lead poisoning; denies syphilis. The first symptoms he noticed last harvest while trying to thrust the knot under the band with his thumb in binding sheaves. His strength is gradually diminishing; has had no fever, no muscular pains; sensation perfect. Temperature of left hand low, feels cold there more readily than elsewhere. Fibrillary twitching is well marked. The muscular atrophy is quite evident in the thenar muscles and interossei. The middle fibres of the trapezius inserted into the spine of the scapula are perceptibly diminishing. Deltoid not yet affected.

Owing to the small attendance due to the snow blockade, the meeting was postponed to the 3rd of May.

Palmerston, May 3rd, 1883.

In the absence of Dr. Stewart, Dr. Yeomans of

Mount Forest was called to the chair. The minutes of last meeting were read and approved.

Dr. Gun of Durham read a very interesting paper on injuries of the brain, accompanied by a report of four cases from his own practice.

Dr. Yeomans reported a severe case of fracture of the skull extending from the foramen spinosum to the auditorius externus, then upward through the squamous portion of the temporal bone, crossing the middle meningeal artery.

Dr. Cotton of Mount Forest read an extremely interesting report on three cases of equinia, which disease, fortunately, is not a very common one. Two of the patients, father and son, were inoculated by the discharges while attending a glandered mare in foaling. The third was supposed to have received the infection while sawing logs drawn by horses affected with the disease. The general symptoms were as follows: chills, vertigo, pains in the head, muscles, joints and bowels, diarrhoea, tongue furred, dry, with brown centre, sordes on teeth, bowels tender and tympanitic, discharges from the bowels frequent, black and very offensive, urine scanty, high temperature, slight delirium. They exhibited the characteristic eruption, about the size of a split pea, hard at first, then becoming pustular or vesicular with a bright inflamed margin. In one case abscesses formed throughout the body. One died comatose; none recovered.

Dr. Stewart of Palmerston reported a case of occlusion of the os at labour occurring in his practice which terminated successfully.

Dr. Graham shewed a number of microscopical specimens amongst which were diphtheritic micrococci.

It was resolved that the next meeting should be held in the same place on the first Thursday in September.

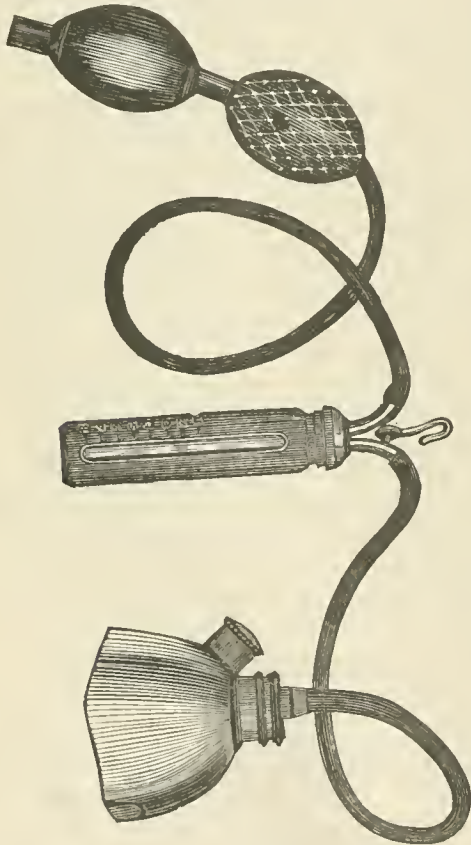
NOVA SCOTIA MEDICAL SOCIETY.

The annual meeting of the Nova Scotia Medical Society was held at Truro on the 20th ult. The opening address was delivered by the President, Dr. Slayter, of Halifax. The election of officers for the ensuing year resulted as follows:—President, Dr. J. S. Somers, Halifax; 1st Vice-President, Dr. H. McPherson, Sydney, C.B.; 2nd Vice-President, Dr. Stewart, Pictou; Secretary & Treasurer, Dr. McDonald, Londonderry. Sydney, C. B., was fixed upon as the next place of meeting.

Selected Articles.

JUNKER'S ANÆSTHETIC APPARATUS.

This apparatus, by which an anæsthetic is not only administered economically, but also in regulated dilution, being now much used both in England and elsewhere, Messrs Krohne & Sesemann, Duke-street, makers, give the following description of its construction and method of employment:—The apparatus consists of three main parts: A bottle holding about two ounces, closed by an air-tight fitting top, through which two tubes are made to pass, a long one, connected with a Richardson's bellows, and a short one, connected by means of India-rubber tubing with a vulcanite face-piece. The bottle for holding the anæsthetic fluid is covered with leather, and the lower half is graduated for eight drachms. The face-piece is provided with an inspiratory and an expiratory valve.



When using the apparatus, from four to six drachms of chloroform or bichloride of methylene should be poured into the bottle according to the expected duration of the operation; it is then suspended from a button-hole in the coat of the ad-

ministrator. By each compression of the bellows about 4.33 cubic centimètres of fresh air is forced through the long tube into the fluid, and escapes impregnated with the vapour in proportion to the contents of the bottle, through the short tube into the face-piece. During the use of this apparatus, fresh air impregnated with fresh narcotic vapour is brought into the face-piece with each compression of the bellows, and if the latter be correctly timed, so as to correspond with each inspiration, the whole of the vapour is inhaled, and on each expiration the exhaled air escapes through the valve and at the edge of the face-piece, so that the patient does not inhale his own breath. The patient has not to breathe through this apparatus as is the case with most inhalers.

It will be noticed, that as the quantity of fluid in the bottle decreases, so does the amount of evaporation, thus a proportionately increasing dilution of the vapour with air is going on from the first. Taking into account that the quantity of air supplied by the bellows with each compression is but from $\frac{1}{15}$ th to $\frac{1}{8}$ th part of air required by an adult for one inspiration, the amount of narcotic vapour used in proportion to the quantity of air which enters the face-piece through its valve and sides, is incredibly small. Experience has proved that this small quantity is sufficient to maintain anæsthesia throughout severe and prolonged operations, the administrator having full control over the supply, and no waste of the anæsthetic, so annoying to the operator and the administrator, can occur.

The merits of this apparatus have long been recognised at the Samaritan Free Hospital. It is especially recommended by Sir Spencer Wells in his work *On Ovarian and Uterine Tumours*, page 277. For sixteen years no other apparatus has been employed at that hospital, for the long operations so frequently performed there—*British Med. Journal*.

DISLOCATION OF THE HUMERUS REDUCED BY KOCHER'S METHOD.

The following notes in the London *Lancet*, April 14th 1883, Mr. W. Chisholm, house-surgeon, University College Hospital, gives. In the *Lancet* of Nov. 4th, 1882, p. 773, attention was called to a paper on the method of reducing dislocation of the shoulder, read by M. Kocher at the meeting of the International Congress in London. Referring only to the subcoracoid form of the dislocation, M. Kocher directs that for its reduction the surgeon should sit on the left of the patient, then the elbow-joint is to be flexed at a right angle, and the joint firmly pressed against the side of the chest. Next, while the elbow is still held in contact with the body, the arm is to be slowly, gently, and steadily rotated out until firm resistance is encountered;

then while this rotation is maintained the arm is to be raised forwards, and a little in, and, lastly, to be rotated in, and the hand brought towards the opposite shoulder. This plan has been tried in six of the cases which have come to University College Hospital during the last five months.

Case 1.—A muscular young adult, with left subcoracoid dislocation. An attempt was made to reduce it with the knee in the axilla, but as this caused much pain the patient was given an anæsthetic. While this was being administered it was decided to give Kocher's method a trial. The patient lying on his back, Mr. Heath flexed the elbow at a right angle, pressed it firmly against the side of the chest, the arm was then rotated outwards, and the head of the bone slipped into the glenoid cavity before the forward movement of the arm was commenced. This case came on just a day before Mr. Heath's expected visit, and was kept so that the students might see it reduced.

Case 2.—An adult female, with right subcoracoid dislocation. This was the first case attempted by this method without an anæsthetic. The patient was seated in a chair, and an attempt was made to reduce the dislocation in the manner described. This was unsuccessful, and the patient was told to lie down on a couch with a view to having an anæsthetic. While in this position and before giving the anæsthetic, another attempt was made at reduction by manipulation, the arm being more firmly pressed to the side. On rotating outwards a little, grating was felt, and just as the outward movement of the arm was commenced the head of the bone slipped into the normal position. Patient experienced very little pain.

Case 3.—A young male adult with right subcoracoid dislocation. He said his arm had been "out" before. In this case reduction was effected with the greatest ease without an anæsthetic, patient being seated in a chair; the head of the bone returning to the glenoid cavity at the commencement of the forward movement.

Case 4.—Similar to Case 3, except that there had been no previous dislocation.

Case 5.—A coal-heaver, a muscular man, with a right subglenoid dislocation. Patient was seated in a chair and reduction effected with some trouble, and only after the elbow was very firmly pressed against the side of the chest; at the commencement of the forward movement the bone slipped into its place.

Case 6.—A male adult, a muscular man, with right subcoracoid dislocation, was seen about noon. He had been drunk the previous night, and did not know how the injury was caused. In this case until an anæsthetic was given the bone could not be disengaged, and the attempt gave very much pain. When the patient was under chloroform reduction was readily effected. In this case the right hand was brought nearly to the opposite shoulder.

Out of six cases five were subcoracoid, and one subglenoid; and though M. Kocher's paper seems only to refer to the former injury, the subglenoid dislocation was reduced by his method without an anæsthetic. Of the five subcoracoid cases three were reduced without an anæsthetic; but in the first case Kocher's method was not tried until the patient was under chloroform. By this manipulation the margins of the rent in the capsule are relaxed, and the rent opened out, thus allowing the head of the bone to slip readily into the glenoid cavity.

JEFFERSON COLLEGE CLINICS.

CHRONIC ARTHRITIS OF KNEE.

The following clinic by Dr. R. J. Levis is taken from the *Col. and Clin. Record*, Philadelphia.

This young man, 18 years of age, about ten months ago received a severe injury about the knee by a heavy piece of timber falling across his leg. He subsequently suffered with chronic inflammation of the knee-joint, for which the usual methods of treatment have been pursued in vain.

I find here a good deal of tenderness and stiffness on motion. The limb cannot be entirely straightened. I intend to give him ether, then extend the limb, and apply the actual cautery to the sides of the joint. I know of no other remedy that will have the same effect as the cautery. These patients have generally gone through all the ordinary forms of treatment by blistering, iodine, and other counter-irritants, before they get to this stage. I am now applying the hot iron to the joint, over the condyles and below them, on the outside as well as on the inner side of the joint. It is not worth while to apply the cautery except to do so to the extent of producing complete localized destruction of the integument. I now will attempt to move this joint and break up adhesions, straightening the limb as much as possible.

I find here a good deal of contraction of the ham-string tendons, especially the bicep. This may require a future tenotomy.

To the surface cauterized with iron, I am now applying carbolic acid in concentrated form in order to prevent pain. The benumbing influence of undiluted carbolic acid is so great as to prevent all pain from burning when the effect of the anæsthetic passes off. He shall now have a wet dressing applied around the joint, and a posterior straight splint applied.

CHRONIC ABSCESS IN THE ABDOMINAL WALL.

This boy is 15 years of age: he comes here on account of superficial enlargement in the left hypochondriac region. I find on the abdominal surface a fluctuating tumor in this position, which he says is tender upon pressure. He has no enlarged

glands behind the neck or elsewhere. This is evidently a cyst; there is fluid of some kind in this swelling. The tumor cannot be made to retire into the abdomen upon pressure, and upon coughing no impulse is communicated; on telling him to rise up without resting on his elbow—thus making the abdominal muscles tense—I find that the growth is freely movable on their surface, and there is no increase in the tension of its contents.

The question is whether it is a simple cyst or connected with the peritoneal cavity? I have just demonstrated that its tension was not increased by increasing the general intra-abdominal tension. I believe, therefore, that it is an independent growth. Using a hypodermic needle I determine its contents to be pus, which we will remove by aspiration through this needle.

TUMOR OF NECK.

This patient, 28 years of age, says he has had enlarged lymphatic glands in the neck for about five years. They are quite large immediately under the jaw on both sides, and especially on the left side of the neck, where a mass of them form quite a tumor. These are quite hard, the skin overlying them seems healthy.

I am in the habit of treating these enlarged glands with hypodermic injections of alcohol. Formerly I used tincture of iodine, but I believe that I get as much good from the alcohol alone, as from the tincture. The iodine is not a specific, but the injection merely acts as a stimulant; this is all that can be accomplished. About ten drops of undiluted alcohol are usually sufficient for one gland. First fix the tumor, and steady it, then inject the alcohol directly into the middle of it. I have seen the alcohol occasionally produce suppuration, which usually is not to be desired, although it would not be a calamity in this case. These injections can be repeated about twice a week. He had the usual internal treatment with iodine and chloride of ammonium, both of which have failed.

CYSTIC THYROID TUMOR.

This man, 60 years of age, presents a large growth over the thyroid gland. It is evidently a cyst, a hygroma, as it is called, probably an enlarged mucous bursa. It moves with the larynx. I will inject carbolic acid as before, in the treatment of hydrocele, after aspirating the cyst. I have added a little water or glycerine to the carbolic acid, for fear it may solidify in the tube and choke it up.

ANCHYLOSIS OF KNEE JOINT.

This case you saw recently; it is one we have had under consideration for some time; and it has been the subject of consultation with the staff of the hospital and Professor Gross.

This boy came before you with a very bent limb,

and, moreover, it was considerably shortened. At one time the propriety of performing a partial excision of the bone had been discussed, probably with a view to producing a false joint. I do not know the history of the case; as you see, he has now bony ankylosis at the knee, which is flexed at a right angle.

There is a question here between excision of the knee joint and amputation of the thigh. Probably taking out a wedge-shaped piece of bone from the femur might give us a straighter limb. The other leg is normal, although in walking he is obliged to stoop down, in order to accommodate himself to the deformity. He has never used crutches, but walks in a stooping or squatting posture. We have explained to him the risks of the different forms of operative procedure I have named; I do not think really that there is much less risk in excision than amputation. I would favor removing a wedge-shaped piece from the front of the femur, just above the joint, but, as I have said, I do not believe that the danger is really much less than from amputation. But, after all, I think that he would have a much more useful limb after this operation, than if he had an artificial one, although it would necessarily be a little shorter than the sound limb.

NÆVUS MATERNUS.—LITTLE.

The patient I now present to you is about six months old, and has a small vascular tumor on the left side of the forehead. It is, as you see, of about the size of a hickory-nut. Its summit is of a bright-red color, while the outer margins of the tumor seem to be covered with healthy skin. On making pressure upon it with my finger, the swelling almost entirely disappears; and upon removing the pressure, it slowly assumes its former size. This tumor is what is known as a nævus. It is also known under the names of aneurism by anastomosis, or erectile tumor, or angioma. It is a disease of the capillaries. The mass of the tumor is made up of capillary vessels freely connecting with one another. The form here presented is of the cutaneous variety. Upon an examination of the abdomen of the child we find another one of nearly the same character. It does not seem to be as deeply situated, however, for the integument does not form any portion of its covering. It is flatter than the one upon the face and somewhat larger. The surface presents a whitish appearance in several places, as if cicatrization was taking place. These tumors may occur upon any part of the body. They are congenital, and are frequently called mother's marks. When first noticed they are generally very small, but gradually become larger. In a certain number of cases they seem to disappear spontaneously. The one on the abdomen of the child seems to be undergoing this process of cure,

the whitish spots on its surface being indicative of a change. The one on the forehead, however, the mother tells us, is rapidly becoming larger. I have met with a large number of examples of this disease, and I have never failed to cure the cutaneous variety by the introduction of heated needles into the base of the tumor. If the tumor be small, one operation is generally sufficient; in larger tumors several operations may be required before the cure is complete.

I will now proceed to operate upon this case. But, first, as to the needles used. It has always been my practice to employ a shoemaker's awl, which is slightly curved at the point and flattened. Such an instrument is much larger than the needles that are generally used for this purpose by surgeons. My assistant holding the child, I place the head between my knees, face upwards; in this way I have perfect control of its head, and am now ready to proceed. Another of my assistants holds the alcohol lamp at my right side, in which I heat the end of the awl to redness, and then plunge it into the tumor. The manner of introducing the awl is of importance. It should be thrust into the base of the tumor and towards the centre, not into the top. Holding it here a moment, I withdraw it and reheat it preparatory to a second introduction. There is scarcely any bleeding. This procedure is repeated until the entire circuit of the base of the tumor is completed. Please observe that I plunge the awl in at the juncture of the skin with the tumor and push it downwards and inwards. If punctures are made only in the top of the tumor, very little is gained by the operation. You should strive to destroy the vessels at its base. Having completed the circuit, I now make a few punctures in the most prominent part, over the surface of the nævus. The swelling has now become very much reduced in size. One of the punctures which I have just now made in the surface of the tumor is followed by a free flow of blood almost equal to an arterial jet. A second introduction of the needle fails to arrest the hemorrhage. Under such circumstances, you will find that the best method of arresting the bleeding will be to make firm pressure over the bleeding point with a sponge for a few minutes. This I have never known to fail in stopping it. The needle is introduced at a black heat; that is to say, although it is heated to redness in the flame of the lamp, before you reach the tumor the redness has disappeared. Although the child cried during the operation, it did not seem to be suffering very much, and now that I have completed the operation the patient has ceased crying. No special dressing is required. I generally advise, however, that the part be covered with a light compress, wet with cold water during the first night.

Two weeks later the patient was again brought to the clinic, when it was observed that a decided

change for the better had taken place, the tumor having shrunk to less than one-third its former size. It was much flatter, and the redness over its surface had almost entirely disappeared, except at one or two points. Two or three additional punctures with the hot awl were made, it being introduced as before into the base of the vascular prominences rather than into their summits. It was predicted that the second operation would be all that was necessary to effect a cure, and that only a very slight cicatrix would remain. There are two other ways of heating needles, namely, by means of galvano-cautery and Paquelin's thermo-cautery. The points coming with these apparatuses, however, are larger than the awl I have used, and the apparatuses themselves are clumsier and much more expensive than the simple alcohol lamp and shoemaker's awl.—*Med. News.*

SURGICAL EXPEDIENTS IN EMERGENCIES.

At a recent meeting of the Medical Society of the State of Pennsylvania, Dr. R. J. Levis, of Philadelphia, gave an account of some ingenious expedients he had contrived in some of those surgical emergencies in which the skill and readiness of the surgeon are often severely tested. The *Medical News* describes some of these as follows:

In case of an *overdistended bladder*, where prompt relief is necessary and no catheter is at hand, he had taken a piece of bell-wire doubled upon itself so as to form a loop, which was readily passed along the urethral canal into the bladder. In a female a rye-straw might be used, its end being rounded with a little sealing-wax, or the stem of a clay-pipe, as crude substitutes for a catheter. In *phlebotomy*, when a proper lancet is not at hand, an ordinary pocket-knife will answer, provided the vein be held in position by transfixing it with a needle after applying the ordinary bandage.

For *obstinate epistaxis* requiring plugging of the nostril, a piece of sponge to which a string is fastened, is forced through the meatus to the posterior naris, small pieces of sponge are then to be threaded on this cord and pushed in succession into the passage until it is filled; when the danger of hemorrhage is over, they can be removed by reversing the process. Another good method in an emergency is to take a portion of the intestine of a chicken or other small animal, close one end and pass it through the meatus; water or air may now be forced into the portion in the nostril so as to make equable compression. If it is necessary to plug the posterior nares, a slender gum bougie, or a piece of thick catgut ligature may be passed along the floor of the nostril and brought out under the soft palate; a string can then be attached and brought out of the nose in front by

withdrawing the bougie; the sponge can then be employed in the usual manner.

In a case of *bleeding from an intercostal artery* from a homicidal wound, he had succeeded in arresting the hemorrhage by introducing the upper part of an ordinary key into the pleural cavity, then turning it at a right angle, and making pressure upon the vessel. After this had been continued for some hours the bleeding ceased.

A very efficient substitute for the *Esmarch elastic bandage* is a flannel roller cut bias. For dislodging and forcing downward a *foreign body in the œsophagus*, an ordinary carriage or riding whip, knotted sufficiently far from the end to ensure flexibility, may be used.

Good temporary *dressings for fractures* may be extemporized by tearing palm-leaf fans into strips; a more permanent fixed dressing can be made by dipping ordinary sand-paper in hot water, and applying it while soft; it adapts itself to the shape of the limb, but becomes sufficiently strong and rigid afterwards; hard dressings can also be made with starch, or eggs and flour.

In moving a patient with *fractured thigh*, the sound limb may be made into a splint by fastening the legs together. In treating fractures of the femur, complicated apparatus is not necessary; simple extension by weights is all-sufficient, the limb being kept in position by lateral supports or sand-bags. The postural method without splints is to be preferred in all fractures near to joints; fracture of clavicle is best treated by the supine position, with the head slightly elevated.

An ordinary gimlet is an efficient instrument with which to *open the mastoid cells* in case of abscess and threatening cerebral complication. The carpenter's rasp may sometimes replace the trephine in replacing fragments of bone after fracture of the skull.

A rubber tube may be used instead of a syringe in cases of *obstruction of the bowels*, the fluid being injected by hydrostatic pressure.

The substitution for belladonna of stramonium where a mydriatic is needed, and replacing carbolic acid by sulphurous acid as a disinfectant; and the employment of hot water in place of all other styptics, were also mentioned.

PRACTICAL POINTS FROM PHILADELPHIA CLINICS.

Dr. Carl Seiler removes polypi from the nasal cavities with the snare, as this causes less bleeding than the polyp-forceps, and touches the galvano-cautery. This prevents the return of the growth, which nothing else will, the doctor having tried iodine, chromic acid, etc. This procedure certainly merits further trial.

Dr. Wharton recommends that superficially situated nævi be cauterized with the strong nitric acid, applied with a glass rod. The resulting slough is followed by a white cicatrix. More extensive nævi call for other treatment.

For catarrhal, or herpetic, or diphtheritic tonsillitis Prof. Pepper recommends, constitutionally absolute rest, large doses of quinine, drop doses of tincture of aconite, and liquid diet, and locally the application of the muriated tincture of iron.

Prof. Tyson often prescribes a mustard plaster prepared with molasses instead of water. For prolonged and mild counter-irritation this acts excellently, as patients often have the plaster on their backs for hours while fulfilling their daily duties. Dr. Tyson also has great faith in jaborandi and its active principle, pilocarpin, in the treatment of uræmia. He considers it *the* remedy for such cases. In Bright's disease and in diabetes the doctor prescribes an exclusive milk diet. He gives only skimmed milk.

Dr. Strawbridge poultices the external ear in the following ingenious manner: He lays the patient's head on the table and fills the external ear with as hot water as can be borne. Over the ear are applied towels soaked in very hot water, the surplus water being drained off by squeezing the soaked towels between dry ones.

For eczematous sores in children and old people Dr. Duhring recommends an ointment of five grains of iodide of lead to the drachm of vaseline.

Dr. Louis A. Duhring recommends for acne, sulphur in some form; preferably the sulphide of calcium internally, and locally the following prescription at bedtime:

R Sulphuret. potash,	3 ss,
Sulphate zinc,	3 ss,
Glycerine,	5 j,
Alcohol,	fl 3 j,
Water,	fl 3 j. M.

Dr. Ellerslie Wallace describes nux vomica as the great invigorator of the sexual organs. He gives the one-half to one-grain dose of the extract of nux vomica three times a day after meals.

Dr. John Ashhurst, Jr., says it is the surgeon's rule for ligation of an artery to cut down over the pulsation of the artery where he feels it. Of course the surgeon should know the anatomy of the parts, as well as the lines for cutting as laid down in the books.

Prof. De Costa says do not aspirate pleuritic effusions as long as no urgent symptoms, such as failure of the heart and symptoms of blood-poisoning, demand it, for the liquid will generally reaccumulate, and the second time it will be purulent. Give iodide of potash and other remedies to promote absorption and to make the kidneys act. For the latter the infusion of juniper and jaborandi inter-

nally, and dry cupping over the region of the kidney will be often of benefit.

Prof. Tyson divides the treatment of acute rheumatism into three kinds to suit different types of cases. Rheumatism occurring in persons of nervous rheumatic temperament who lead a sedentary life but are otherwise well fed and clothed, should be treated by salicylic acid or the salicylate of sodium; twenty grains of the latter every four hours for the first twenty-four or forty-eight hours. Continue the medicine after convalescence is established for some time—about as many days as the disease itself lasted. Rheumatism occurring in obese persons who are free livers and who use malt liquors will be best treated by the alkaline treatment. One and a half drachms of bicarbonate of soda in lemon-juice every four hours for four days, afterward twenty grains three times a day combined with iron and quinine. Rheumatism occurring in anæmic persons who have been under-fed and overworked should be treated with the tincture of iodine. When the types shade into each other give the salicylic acid with the other treatment. The diet should consist of skimmed milk, chicken or mutton soup, beef broth, or other liquid diet. Anodynes and the old "six-weeks-abad" treatment have gone out of date.

Dr. Wm. Goodell, the world-famed gynecologist of the university, recommends:

R Carbolic acid, 3 j,
Morphine sulphate, gr. x,
Boracic acid, 3 ij,
Vaseline, 3 ij, M.

for pruritus vulvæ, and also the patting of the parts with a sponge soaked in boiling-hot water. This is also a most excellent application for that rawness so often found between the thighs of the newly born.—*Med. Herald.*

COMPOUND COMMUNUTED FRACTURE OF THE SKULL; TREPHINING.

Dr. A. D. Murray reports the following cases in the London *Lancet*, April 28th, 1883:

On October 26th, 1882, I was called to see H. G.—, a man about thirty-eight years of age, who had been thrown out of a cart. I found him suffering from a downward dislocation of the shoulder and a severe wound of the head. After reducing the dislocation I examined the head, and found that there was an extensive fracture of the parietal bone, a triangular fragment being deeply depressed and driven under the sound bone. From the depression fissures could be felt running downwards for about an inch and a half towards the eye and ear. The man had very slight symptoms of concussion and none of compression; but looking at the amount of depression I resolved to trephine

without waiting for symptoms to come on. The operation was performed in the usual way. A little more than half a circle was removed from the sound bone above the apex of the triangular depressed portion, and after a corner had been removed by means of the saw the piece was easily lifted out; a clot was found under this. The middle meningeal could be seen pulsating at the lower corner, but was uninjured. Some fragments were taken away, the wound dressed with carbolic oil, and washed frequently with carbolic spray. The man made an excellent recovery, never having had a bad symptom.

I think that this case points strongly to the advisability of trephining at once in compound comminuted depressed fracture of the skull, without waiting for symptoms of compression. The operation does not add to the patient's danger, and may, in all probability, be the means of preventing serious complications. I feel sure that had the sharp point of bone remained pressing on the membrane serious irritation would have followed, and that the operation would ultimately have had to be performed under much less favourable circumstances.

PHOSPHATES IN MEDICINE AND SURGERY.—*La Tribune Médicale*, No. 764, contains a very interesting review of the use of phosphate of lime in medicine and surgery. Rachitis, osteomalacia, caries, etc., yield to a course of this remedy, to say nothing of its value in hastening the union of fractures. Twenty years ago Piorry advised its administration to pregnant women from the third month to the end of gestation. He also gave it in phthisis, etc. At that time the remedy was used empirically; to-day we know the *rationale* of its action. It is mainly to Dusart that we owe this latter knowledge. In 1869 he published his exhaustive and satisfactory experiments, which demonstrated:

1st. The presence of phosphate of lime is necessary in the process by which the albuminous material furnished by the food becomes transformed into the tissues of the body.

2nd. The vitality and animal heat in animals are in direct relation with the amount of phosphate of lime contained in their organization.

3d. In case phosphate of lime is not supplied, the tissues draw in their need upon the skeleton, which by consequence suffers, just as the adipose tissue is made to yield the hydro-carbons where these are wanting in the food.

The phosphate is not taken up in the stomach, because it is insoluble, but here is where the labors of Dusart have again come to our aid in giving us the soluble lacto-phosphate of lime.

This salt, administered to infants, causes them to increase remarkably in health and vigor. In rachitis the hospitals of Paris furnish hundreds of cases of its good effects. In one case most marked,

where death was almost impending, the child was restored completely to health by the use of Dusart's syrup of the lacto-phosphate without the administration of any other remedy. Prof. Pacquet, of Lille, as long ago as 1872, spoke of its marked benefit in all cases of malnutrition. He especially accords to it an undoubted value in the treatment of fractures, and enumerates among others a case of fracture of the anatomical neck of the humerus, recovery in thirty-two days; a fracture of the olecranon in eighteen days; two fractures of the thigh, one cured in fifty-two days, the other in fifty-five; fracture of the lower jaw in fifteen days; a compound comminuted fracture of the leg in seventy-two days. He concludes: One has only to compare a series of cases of fractures where the lacto-phosphate of lime has been used with a series in which it has not been used to note a remarkable difference in favor of the salt.—*Cin. Lancet and Clinic.*

RHEUMATISM AS A NEUROTIC DISEASE.—In the *Medical News* Dr. Webster Smith communicates an interesting and rare example of a case of acute articular rheumatism occurring in a child two years and a half old. Commenting on the case, the editor observes that Dr. Smith very acutely says that the question of cerebro-spinal meningitis was considered in making up the diagnosis. The joint-changes which ensue in cases of meningitis have been described by Prof. Charcot and others. The late Prof. J. K. Mitchell advocated the neurotic origin of rheumatism, and his son, Dr. Weir Mitchell, has published many observations proving the dependence of joint-changes on spinal and nerve lesions. It is now, indeed, established that changes in the joints, which can not be distinguished from those of acute rheumatism, occur in cases of disease and in lesions of the spinal cord, the membranes, and the nerve-trunks. This admitted, the case of Dr. Smith may be regarded from this point of view. The joint inflammation, the hyperpyrexia, the opisthotonus, and the muscular (choreic) spasms, the whole, concluding with coma, may be regarded as due to a common factor, meningitis. Whether one or the other view be taken, the case admirably illustrates the remarkable correspondence between acute rheumatism and certain spinal affections, and goes far to prove their community of origin. This admitted, acute rheumatism becomes not merely an inflammation of the fibrous tissues, but a neurotic affection.—*Medical Times and Gazette.*

A READY METHOD OF OBTAINING LOCAL ANÆSTHESIA.—Dr. Cheize, in *Jour. de Med. et de Chir. Pratique*, says among the difficulties which surgeons in this country frequently encounter, and must promptly overcome, is the paucity of surgical instruments and appliances. The want of a Rich-

ardson atomizer I had recently to supply in the following manner:

A young girl presented herself with inverted toe nails and solicited an immediate operation, *i.e.* extirpation. I imbibed with ether a piece of cotton wadding of the size of five francs, and placed it upon the big toe, and with a common hand bellows I blew on it for a few minutes, until complete evaporation had taken place. I saturated the cotton wadding a second time, and again manipulated the bellows. In less than five minutes anæsthesia was complete. I extirpated the ingrown nail, and applied to the matrix the actual cautery without the patient experiencing the least pain. I had to exhibit the extirpated nail in order to prove to her that the operation was performed. This is an anæsthetizing apparatus of the greatest simplicity, and within reach of any one. Is it new? I do not know. It is certainly very simple. Country practitioners may find it of great value.—*St. Louis Med. and Surg. Jour.*

ATROPIA FOR EAR-ACHE.—The *Boston Jour. of Chemistry* says that Dr. A. D. Williams recommends its use as follows:—The solution is to be simply dropped into the painful ear, and allowed to remain there from ten to fifteen minutes. Then it is made to run out by turning the head over, then being wiped with a dry rag. The solution may be warmed to prevent shock. From three to five drops should be used at a time. The strength of the solution must vary according to the age of the child. Under three years one grain to the ounce, and over ten years four grains to the ounce of water. In adults almost any strength may be used. All ages will bear a stronger solution in the ear than in the eye. The application should be repeated as often as may be necessary. Usually a few applications will stop the pain. In acute suppurative inflammation of the middle ear and acute inflammation of the external meatus, atropia will only slightly palliate the suffering, but in the recurring nocturnal ear-aches of children it is practically a specific.—*Med. and Surg. Reporter.*

SCARLATINAL INOCULATION.—Dr. Stickler has reported in the *Medical Record* (quoted by the *Cincin. Lancet and Clinic*) a number of vaccinations with mucus from the Schneiderian membrane of the horse affected with modified scarlatina. He vaccinated twelve patients who had never had scarlatina with the equine virus, and after all symptoms from that had subsided he injected subcutaneously some "human scarlatinal blood." The vaccinations with the equine virus were all followed with symptoms characteristic of mild scarlatina; the after injections of scarlatinal blood produced no effect whatever. From these experiments he adduces the following points:

"First—The safety in using subcutaneously the virus obtained from the horse.

Second—That when this virus is implanted in the human tissues, there follows a local eruption similar to that seen in mild cases of scarlatina.

Third—The system appears to be protected against the action of the human scarlatinal poison after vaccination with the equine virus."

TREATMENT OF FLOATING KIDNEY BY FIXATION.—We are informed that Dr. David Newman, of Glasgow, has performed for the first time in this country the operation of nephroraphy. The operation was performed in the following manner: The kidney was exposed by a vertical incision in the right loin, immediately external to the outer edge of the quadratus lumborum, and extending from the lowermost rib to the crest of the ilium; the capsule of the kidney was opened and stitched to the edges of the wound; and two catgut sutures were passed through the cortex of the kidney, the muscles, fascia, and skin, and secured externally by buttons. The patient suffered from severe symptoms, and was treated for several years without success; but since the operation the symptoms have entirely disappeared, and she has now almost recovered from the effects of the operation, which was performed three weeks ago.—*Lou. Medical News*.

JEQUIRITIC OPHTHALMIA.—Wecker (*Ann d'Oc.*, Nov.-Dec., 1882) has employed jequirity in a large number of cases of obstinate granular conjunctivitis, and draws the following conclusions:—1. Lotions of infusion of jequirity-seeds produce a purulent ophthalmia of a croupous nature, the intensity of which can be regulated by the number of lotions which are employed, and by the strength of the infusion employed. 2. The cornea runs no risk during the evolution of the jequiritic ophthalmia. In only a single case, in which the ophthalmia was pushed to a veritable diphtheritic aspect, was there produced a circumscribed and transient desquamation of the cornea. 3. The jequiritic ophthalmia rapidly cures the granulations, and, even if reproduced several times, it acts with much less danger and discomfort to the patient than inoculation, for it always disappears, without any treatment, by confining the patient for from eight to twelve days in a darkened room.—*New York Medical Journal*.

NEW OPERATION FOR SPINA BIFIDA.—The report of an unusually interesting operation is communicated by A. W. Mayo Robinson in the *British Medical Journal* (March 24). Being obliged to operate early in a child only six days old, the spina bifida being in the lumbar region, and the skin over the swelling being so thin as to threaten rupture, the skin was dissected off and the redundant membranes removed. The serous edges of the borders of the deep wound were brought together

by silk sutures, and over the sac was placed a portion of periosteum obtained from a living rabbit. The operation was successful in closing the opening and in saving the patient, but the bony tissue had not developed from the periosteum up to the time of reporting the case. The fibrous periosteum, however, doubtless strengthened the wall, and so prevented a return of the disorder.

TREATMENT OF STYES.—Louis Fitzpatrick, J. R. C.S., in the *Lancet*, says: The local application of tincture of iodine I have found, after many trials, to exert a well-marked influence in checking the growth of the sty. This is by far preferable to nitrate of silver, which makes an unsightly mark, and often fails in its object. The early use of iodine acts as a prompt abortive. To apply it the lids should be held apart by the thumb and index finger of the left hand (or a lid retractor, if such be at hand), while the iodine is painted over the inflamed papilla with a fine camel-hair pencil. The lids should not be allowed to come in contact until the part touched is dry. A few such applications in the twenty-four hours is sufficient, and I have never seen a single instance in which, after this treatment has been resorted to, the sty continued to develop itself.

RESORCINE AS A LOCAL APPLICATION TO CHANCRES.—In the January number of the *Annales de Gynecologie* MM. Lebland and Fissiaux report six cases of soft chancre in women treated by the application of resorcine in powder or solution. The formula of the solution recommended is five grammes (75 grains) of resorcine to 20 grammes (5 oz.) of distilled water. The average duration of the six cases under this treatment was twenty-three days, whilst in five cases treated with iodoform the average duration was thirty-eight days. Resorcine is said to cause but slight pain, which usually disappears rapidly. The entire absence of odor gives this drug a great advantage over iodoform, to which indeed the authors consider it in all respects superior as a dressing for soft sores.—*British Medical Journal*.

RADICAL CURE OF INGUINAL HERNIA BY DISSECTION.—At the last meeting of the surgical section of the Academy of Medicine, Mr. William Stokes exhibited a patient whom he had operated on by this method for a strangulated inguinal hernia of the left side. The other side had been operated on in Liverpool some time since by the ordinary method, and had failed. Mr. Stokes dissected down to the pillars of the ring and stitched them and the peritoneum together with a piece of catgut. The operation was performed five months ago, and has turned out most successful. Mr. H. Gray Croly exhibited also on the same occasion a patient with inguinal hernia in which the same method was used with a similar result.—*Lancet*.

INCISION INTO AND DRAINAGE OF THE PERICARDIUM.—At the meeting of the Royal Medical and Chirurgical Society, on Tuesday evening last, Dr. Samuel West related a successful case of purulent pericarditis, treated by free incision and drainage. It is the first case which has been so treated in this country. The only other recent case on record is the one by Dr. Rosenstein, of Leiden, which was described in these pages two years ago. Dr. West's patient has fully recovered. There is no deformity of the chest, and nothing but a small scar remains to remind the patient of the narrow escape his life has had.—*Med. Times and Gazette.*

A NEW EDITION OF THE BRITISH PHARMACOPEIA.—The General Medical Council have arranged for a new edition of the British Pharmacopœia, to be prepared under its direction by Profs. Redwood, Bentley, and Attfield, at a compensation of £800, this sum to include the cost of any experiments requiring to be made. The pharmacopœia committee recommend considerable changes in chemical nomenclature, in symbol notation, and in the method of representing the quantities of ingredients to be used in the preparation of medicines. They advise the addition of twenty-nine articles, and the omission of three.

SALICYLIC ACID IN RHEUMATISM AND TYPHOID FEVER.—In the course of a case of rheumatism in a child, related by Dr. J. P. Thomas, of Pembroke, Ky., in the *Louisville Med. News*, March 31, 1883, the author states that the following formula has proved to have so many advantages that he urges the profession to give it a trial:

R. Acid salicylic, 3 ss.
Potass. acetat., 3 ij.
Syr. limonis, 3 ij.
Aque aromatic., 3 iv.

M.—The usual dose for adults in rheumatism or typhoid fever, one tablespoonful every two or three hours, largely diluted with water.—*Med. and Surg. Reporter.*

FELINE TEST FOR DEFECTIVE SEWER PIPES.—Cats have a great fondness for the odor of valerian. So an ingenious Boston woman, suspecting some defective pipes, borrowed two cats and shut them up in the suspected room; then, having purchased some oil of valerian, poured it into the highest basin in the house, and proceeded down stairs to watch the result. She was gratified to find both manifesting a preference for a certain spot in a closet near which a waste-pipe ran; and here, on further inspection, a complete separation of the pipe was discovered.

THE TREATMENT OF OBSTINATE NEURALGIA.—M. Verneuil, in a communication to the Surgical

Society of Paris (*Le Prog. Med.*, No. 49, 1882), referring to the surgical treatment of obstinate neuralgia, said that all therapeutic resources should be exhausted before surgical interference was undertaken. He recalled a case which was cured by hyoscyamin, after resection of all the ends of nerves and even amputation had failed to give relief.—*Med. Record.*

It is said of a talented (?) physician of Cincinnati that the only trouble he ever experienced in the introduction of the catheter in the female was that it was so apt to hitch against the prostate gland. He is inventing an instrument to overcome the difficulty. This is only equalled by the medical man in England who advertised a book on disease of the prostate gland in both sexes.

AN ANTIDOTE FOR PILOCARPIN.—Dr. Frommuller, of St. Petersburg, states that the symptoms of poisoning produced by the injection of gr. $\frac{1}{2}$ of hydrochlorate of pilocarpin, disappeared within two minutes after the injection of gr. $\frac{1}{2}$ of hydrochlorate of homatropin, the pulse, which had previously been at 120, falling to 80. This is not an isolated case.

FOTHERGILL'S COUGH MIXTURE.—Dr. J. Milner Fothergill, of London, considers the following a most elegant and palatable cough mixture:

R. Syr. Scillæ..... 3i
Acid. Hydrobrom. dil.....
Spts. Chloroformi aa..... 3ss
Aquæ..... 3j—M.

CITRIC ACID IN FROST-BITE.—Lapatin, a Russian surgeon, who has had considerable experience in the treatment of frost-bites among the troops in the last Turkish war, says that a mixture of equal parts of dilute citric acid and peppermint-water is an effectual cure for frost-bite.

TREATMENT OF STYES.—For hordeolum Dr. David Webster has used calcium sulphide, a granule (gr. $\frac{1}{10}$ each) each hour until ten have been taken, repeated daily, with marked benefit.—*Archives of Medicine*, February.

BACTERIA are best destroyed by a solution of bichloride of mercury (1 part in 10,000). This has been used successfully as an injection in gonorrhœa.

"Alcohol," said the professor, "has killed more people than yellow fever." "That is true," said the somewhat bibulous student; "but that is only because more have taken it."

DR. DRINK, the author of the surgeon's "*Vade Mecum*," died on the 15th ult., at the age of 68 years.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, JULY, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

PRESCRIBING BY ROTE.

Dr. Lionel Beale, in his very excellent little volume "On Slight Ailments," laments the falling off among the younger generation of practitioners in the art of prescribing. "I have often heard the remark," he says, "that our predecessors knew more about the treatment of disease than we of this generation do. There is some truth in this; and I am sure that many old practitioners now living are more successful in relieving the aches and pains of their patients than some of the young ones, who may, nevertheless, have a far more intimate knowledge of the diagnosis of obscure forms of disease and of the minute pathological changes which have damaged tissues and organs." Every observant medical man must frequently have had the opportunity, either in his own case when commencing practice, or in that of his younger brethren, of verifying the correctness of Dr. Beale's remarks. Those holding positions on the teaching staffs of our medical schools will more particularly have had occasion to note this. It is not that there is any general decrease among students in abstract knowledge of the principles of therapeutics or of the action, doses and incompatibilities of medicines. But there does seem to be an inability to apply those principles to the practical treatment of disease in its varied forms.

With reference to the cause of this deterioration which Dr. Beale bewails, we would remark that it is certainly not the teaching that is at fault, for we know that the tendency of the age is to make this as thorough and as practical as possible. It is

not, we believe, any failure of application on the part of the students, for we are assured that the standard of the classes is steadily rising year by year. We think Dr. Beale himself, though all unconsciously, gives us a clue to the source of the mischief. A few lines below the passage just quoted, he tells his class that "it will be well for them to take notes of prescriptions." Now, as a matter of fact, this is the very thing that is overdone. We are very far from deprecating the practice of taking notes. Nothing tends so much to concentrate the student's attention, to arouse his interest, to form his mind and to impress important facts indelibly upon his memory, as judicious note-taking during his attendance upon didactic and clinical courses. But there are two ways of taking notes, as there are of doing everything else, and we are disposed to believe that to the practice of indiscriminately cramming a note-book with formulæ, is to be traced much of the inaptitude for extemporary prescribing that many newly graduated practitioners find such a serious stumbling-block in the path of their profession. Among a certain class of students—by no means a small one—there seems to be a race who shall amass the largest collection of prescriptions. It is the same story in the lecture-room, the dispensary and the hospital clinic. Every lecturer on medical subjects must have remarked, with more or less amusement, that in order to galvanize into life a sleepy and inattentive class, nothing is so effectual as the judicious interpolation of an occasional prescription. No sooner is the cabalistic R written on the blackboard, than there is a general stirring up of the dry bones; the sleepy become alert, the inattentive interested; note-books and scraps of paper are drawn from their recesses, and down goes the formula, to be preserved intact and inviolable as the laws of the Medes and Persians "for future reference." The same thing occurs at the indoor clinic, while the dispensary prescription book is ransacked by the unfortunate victims of this *prescriptionum sacra fames*.

Now all this would be well enough did it go no further; but unfortunately the prescription collector is apt to place too much dependence upon his collection for the future treatment of his prospective patients. His collection book is his sheet anchor; without it he is lost; with it he is prepared to cope with every disease known to science

—by name. This is not as it should be. It would be as reasonable for a student to expect to become a skilled geometrician by getting up his Euclid "by heart," as to hope to become a successful practitioner by blindly relying upon stereotyped formulæ. It is destructive of all self-reliance; it is fatal to anything like an intelligent appreciation of the value of symptomatology; it means, in how many cases, material death to the patient and moral dissolution to the practitioner. The blind worshipper of the fetish of formula has his own pet prescription for every malady under the sun. He has been aptly likened to an unskilful archer with a quiverful of arrows which he does not know how to use; he draws his bow at a venture, and if the shaft chance to hit the mark, it is as much by good fortune as anything else. It matters not to him what are the conditions of the case. He prescribes for the name of the disease, not the symptoms. He is like Shakespeare's courtier in his narrow-mindedness,—

"Telling me the sovereign'st thing on earth
"Was parmaceti for an inward bruise."

Of course this state of things cannot last for ever. The young practitioner, if he possess a molecule of sense, soon perceives that if he would achieve success he must do something more than treat the mere name of the disease. But by the time he has reached this sage conclusion the question arises, how much damage has he done—to his own reputation no less than to his patients' health. How much disappointment and humiliation might he not have spared himself, had he, during his student days, devoted less time to the acquisition of prescriptive formulæ, and more to the study of the *rationale* of therapeutics, of the adaptation of certain remedies to certain conditions, apart from the mere nomenclature of disease, and of the harmonious blending of drugs into safe and efficient combinations, wherein every symptom is considered and every individual item has its *raison d'être*. We hear a good deal now-a-days about practical work in the medical schools. Its importance as a factor in professional training is now generally recognized, more especially in connection with the clinical study of disease. It is not too much to hope that its sister art, that of prescriptions and prescribing, will soon receive the recognition it deserves. The two should go hand-in-hand, intelligent recognition with intelligent treatment of the ever-varying forms of disease.

ONTARIO MEDICAL COUNCIL.

The meeting of the Ontario Medical Council, the report of which will be found in another column, was this year unusually brief, yet some important matters were under discussion, and duly considered, both in council and committee. In the election of President, the Council did an act of justice to the Homœopathic members for which they are to be commended, for so long as these gentlemen are associated in the carrying out of the act for the general good, they should not be debarred by reason of any difference of opinion as to practice, from the honors the Council has at its disposal. Dr. Logan is a worthy representative of the Homœopathic body, and we feel assured will do credit to the position to which he has been unanimously elected by his confrères. We are also very much pleased to observe the wise discretion exercised by the Council in refraining from making any radical changes in the curriculum, until they are seen to be imperative. We well remember in times past, the frequent and annoying changes in the curriculum from year to year, until the announcement was so complicated that no one understood it, and students were never sure what the next turn of the kaleidoscope might reveal. In consequence many of them gave up in despair and went abroad to seek in another way the necessary qualification to enable them to practise in Ontario. Instead of making any hastily considered changes, a committee was appointed to carefully consider the changes (if any) imperatively required, and report at the next meeting of the Council. Much as we would have liked to have had attendance upon a "summer session" made compulsory, we think the Council acted wisely in carefully considering the matter before putting any additional burden upon the students. The proposal, also, to return to the system of annual examinations, once more received its quietus, and we trust it will not again be brought forward. The division of the examinations into primary and final is found in practice to work well and is a sufficient guarantee both to the profession and the public. We trust therefore that no change in this direction will be entertained by the Council.

With reference to the regulation suggested by Dr. Edwards in regard to "case-taking," which proposes that a case in medicine and another in

surgery shall be written out in detail and sent to the examiner by candidates for the licence, we consider it too cumbersome and of little practical value. The proposed regulation is somewhat similar to that which requires all candidates for the degree of doctor of medicine to write a thesis, a requirement which is now being discontinued by most universities. All such evidences of qualification are worthless, for the simple reason that they are for the most part copied from books, and even in some cases written for the candidates by proxy, and so would it be in reference to "case-taking." A much better guarantee of experience in clinical work would be to exact from each candidate for the final examination a certificate, duly signed, of having acted as clinical clerk and surgical dresser in some general hospital for a period of not less than three months.

The subject of appointing a public prosecutor by the Council was again up for discussion, but the proposal was not entertained. The appointment of a public prosecutor, much as it would gratify many members of the college, would involve the Council in considerable trouble and entail an expense which, it is needless to say, it is not at present in a position to incur. Besides, it is useless to endeavor to purge the community of unlicensed quacks, while licensed quacks—members of the college—are permitted, from want of proper legislation, to prostitute their high calling, for filthy lucre and for the benefit of a set of impudent peddling Yankee charlatans. A committee was appointed to draft amendments to the Medical Act, and we trust a clause will be inserted which will in some measure put a stop to these disgraceful proceedings on the part of those hirelings, who are, by their mean and mercenary actions, bringing into disgrace an honorable profession.

AMERICAN MEDICAL ASSOCIATION.

The thirty-fourth annual meeting of the American Medical Association was held at Cleveland, O., on the 5th, 6th, 7th and 8th ult. The President, John L. Atlee, M.D., of Lancaster, Pa., occupied the chair. Three Canadian members of the profession, viz., Drs. Osler and Roddick, of Montreal, and Dr. Harrison, of Selkirk, were present and were invited to seats on the platform. Considerable interest was

manifested with reference to the subject of the Code of Medical Ethics, especially concerning consultation with homœopaths; but few were prepared for what actually took place. We are told that it was "evident that the feeling in favor of retaining intact the time-honored code of the Association was so universal, that it was useless to discuss the subject, and the strength of this feeling was indicated by the dignified silence which was almost universally maintained with regard to it." The truth of the matter is, that every delegate, before registering, was required to sign a blank form of acknowledgment of his adhesion to the Association's code. This amply accounts for the "dignified silence"; but we believe this attempt at coercion on the part of the Association will be followed by a reaction, which will have the direct opposite effect of what was intended. We are not prepared to subscribe to the wisdom of the Association's decision on this question, for, to our mind, it savors too much of that ill-advised, petty persecution which in all cases fails to suppress the persecuted, and in many actually contributes to their ultimate success. This has, as a matter of fact, been the case with the followers of Hahnemann, who owe not a little of their progress to the ill-judged, hostile attentions of the regular school. Quiet indifference would have been by far the better policy.

In regard to the proceedings of the Association, many interesting and valuable papers were read on a variety of subjects in the various sections, and were discussed with vigor and earnestness and with a view to their practical bearing. Dr. J. H. Hollister, of Illinois, delivered the address on Medicine; Dr. J. K. Bartlett, of Wisconsin, that on Obstetrics; and Dr. W. F. Peck, of Davenport, Ia., that on Surgery. The report of the committee on the proposed journal was adopted without much discussion, the general feeling being apparently in favor, at all events, of a year's trial of the new plan. Over two thousand pledged subscriptions have been obtained, indicating an annual revenue of \$12,500. Dr. N. S. Davis, of Chicago, will be the editor. Dr. Austin Flint, sr., of New York, was chosen President of the Association; and Washington was selected as the next place of meeting, on the first Tuesday in May, 1884.

ONTARIO MEDICAL ASSOCIATION.

The meeting of the above association was held in Toronto on the 6th and 7th ult. and was well attended. The very limited time, viz.: two days, was hardly sufficient to enable the association to get through with the rather large number of papers presented. The result was an undue haste in some cases, where a little more time and attention should have been bestowed. Some papers of ordinary merit occupied much longer time in reading than was intended, while others of superior merit were either postponed beyond their order of precedence, or crowded out altogether. Some of the members also who brought patients with them, received scant attention, and in one instance the case was hurried through with almost indecent haste, and, although wholly unintentional, the gentleman presenting the patient received very little consideration for his kindness. As a rule too little time was allowed for discussion, and only a few seemed desirous of availing themselves of the small opportunity offered. One or two incidents occurred which it is scarcely worth while to refer to, except to avoid a repetition of them at some future meeting. We allude to the absence of the usual courtesy shown to the retiring president and ex-president, and in this case we might almost say, the founders of the association, in not inviting them to seats on the platform, or nominating either of them to the chair in the absence of the president. Of course we cannot but think, nay we feel assured, that this was purely an oversight; but it was none the less chilling. When it was announced that the association had decided to meet next year in Hamilton, some one remarked that he thought it should go east and learn a little of that *suaviter in modo* which is so characteristic of our confrères in the sister province of Quebec.

It was a source of regret to all that the president (Dr. Macdonald, of Hamilton) was prevented through illness from presiding during the first day of the meeting, and on the afternoon of the second day he was obliged to leave the chair before the close of the meeting, in order to take the train for Quebec, where he sailed for a holiday trip to Europe. He carries with him the best wishes of the Association for his future welfare and happiness.

INSTANTANEOUS LIGHT.—The *Boston Transcript* of Dec. 30, describes a unique apparatus manufac-

tured by the Portable Electric Light Co., 22 Water Street, Boston. It occupies the space of only five square inches and weighs but five pounds, and can be carried with ease. The light, or more properly lighter, requires no extra power, wires or connections, and is so constructed that any part can be replaced at small cost. The chemicals are placed in a glass retort; a carbon and zinc apparatus, with a spiral platinum attachment, is then adjusted so as to form a battery, and the light is ready. The pressure on a little knob produces an electric current by which the spiral of platinum is heated to incandescence. The usefulness of the apparatus and the low price (\$5) will no doubt result in its general adoption. Some of the prominent business men of the State are identified with this enterprise. In addition to its use as a lighter the apparatus can also be used in connection with a burglar alarm and galvanic battery.

RHEUMATIC ENDOCARDITIS.—Dr. MacLagan complains in the *British Medical Journal* that his treatment of this disease by moderately large and frequently repeated doses of salicin has not received a fair trial, and that therefore those who denounce his method as a failure do so unjustly. He insists that the alkaloid—not the salicylate—should be given in doses of from 20 to 40 grains every hour for six hours, or until pain is relieved (which it generally is within that time), and that the same dose should then be given every hour till the pain is gone and the temperature falls to the normal, which usually happens within 24 hours. He gives the preference to salicin, not because he regards it as superior to the salicylate of soda as an anti-rheumatic, but because it may be given in large and frequent doses without causing such disturbance of the system as not unfrequently follows the use of the salicylate and necessitates its suspension.

ENLARGED BRONCHIAL GLANDS.—Prof. Wm. Pepper presented a case at one of his clinics, at the University Hospital, of enlargement of the lymphatic glands surrounding the right bronchus. The symptoms were dullness on percussion, diminished bronchial respiratory murmur on auscultation, pain over the region when the patient was in the recumbent posture, and a scrofulous diathesis. Heart sounds were normal, and the lungs

were healthy. Prof. Pepper prescribed blisters on the back over the seat of the trouble, and the following prescription to be taken internally :

R. Hydrarg perchlor gr. j ;
Chlor. ferri gr. ij ;
Glycerini..... ʒ vj.

Sig.—A teaspoonful diluted with water three times a day after meals.

PERSISTENT HICCOUGH.—The following are some of the remedies recommended by correspondents in a recent number of the *LANCET* for the relief of singultus: Hypodermic injection of morphia; laudanum and chloroform rubbed in along the course of the phrenic nerve; spinal ice-bag; hot compresses to the spine; ten minims of tincture of opium every four hours; hyoscyamine, arseniate of strychnine aa $\gamma \frac{1}{2}$ gr, bromhydrate of cicutine $\frac{1}{10}$ gr. every half hour until relieved; ether sulph. vin. ipecac., tr. digitalis, aa ʒss., magnesia sulph. ʒij., chloroform water to six ounces—two tablespoonfuls every four hours; infusion of mustard seed; inhalation of chloroform, ether, or amyl nitrite.

BRITISH MEDICAL ASSOCIATION.—The fifty-first annual meeting of the British Medical Association is to be held in Liverpool on July 31st and three following days, under the presidency of Dr. A. T. H. Waters. The address in Surgery will be delivered by Reginald Harrison, F.R.C.S.; and the address in Pathology by Dr. C. Creighton.

The general secretary, in the *Brit. Med. Jour.* of May 26, gives the following as the strength of the Association:—30 branches, with a membership of 6,275 and an unattached membership of 3,141, including 199 foreign and colonial members, giving a grand total of 7,416 members. This constitutes the most widely diffused and powerful medical organization in the world.

REMOVALS.—Dr. Sharp, of Woodstock, N. B., has removed to Minneapolis, Minn. The following resolution respecting his removal was passed by the Carleton Medical Association:

Resolved,—That the President and members of the Carleton County Medical Society have heard with much regret of the intended removal of Dr. Sharp from Woodstock, and desire to express to him the high esteem which they have always felt for him, both as a man, a fellow practitioner and a member of this society. Wishing him and his family a hearty God's speed, they would fain hope that wherever in

future his lot may be cast, his skill as a physician, and his character as a gentleman, may meet with that full appreciation which they deserve, and which they always have met with in this community.

Dr. Sprague, of Hartland, has removed to Woodstock, N.B. Dr. Rollins, of Crediton, has removed to Exeter, Ont., and Dr. Nasmith from Dashwood to Crediton.

WEATHER AND SKIN DISEASE.—Dr. Stelwagon, of Philadelphia, in an analysis of 2,000 consecutive cases of skin disease, of which a detailed report appears in the *Philad. Med. Times*, points out that skin diseases are much commonest in the spring season—March, April and May, the preponderance being in the order named. He says the explanation of this may be found in the fact that at this season of the year, especially during March and April, the weather is apt to be damp and windy, with sudden changes of temperature. He thinks, moreover, that the skin, having been subjected to the prolonged cold of winter, is weakened, and therefore more susceptible to disease.

CANADIANS ABROAD.—Drs. J. A. Hunter and E. G. Knill, Ontario; and T. Bairston, Halifax, have passed their final examinations and been admitted members (double qualification) of the Royal College of Physicians and Surgeons, Edin., and Dr. C. A. S. Gordon has passed the primary in the same institution.

Drs. Reuben Levi (McGill), and H. Mickie (Toronto), have passed the Royal College of Surgeons, Eng., and received the diploma, and Dr. R. J. Bliss Howard (McGill), has passed the primary examination for the Fellowship of the Royal College of Surgeons, Eng.

David Mullock, M.B., C.M., of Winnipeg, Man., has received the degree of M.D. from the University of Aberdeen.

POISONING BY CHLORATE OF POTASH.—An assistant-surgeon, U.S.A., writes to the *Med. News* that he has repeatedly observed injurious effects resulting from the excessive use of chlorate of potash, more especially in cases of diphtheria. In one instance, in which a fatal termination took place, the patient seemed to be gaining rapidly until the stomach gave out, and in spite of every effort to control the irritability, vomiting persisted until death, which occurred 26 hours after this symptom set in. He believes the drug destroyed

the tone of the stomach and poisoned the whole system of the patient.

CRESKIT EUNDO.—The British Pharmacopœia Committee recommend the addition to the promised new issue of 29 articles and the omission of three. The German committee, on the other hand, recommend the excision from their armamentarium of a huge catalogue of preparations and the adoption of a comparatively small number of new remedies. One would have thought that this was the kind of treatment best adapted to our Pharmacopœia. If we go on at the present rate there is great danger of its becoming as unwieldy as the German volume; as it is, there are, we might almost say, scores of preparations in its pages which are not used once in a lifetime.

DEATH FROM MALE FERN.—A case of poisoning from an overdose of the ethereal extract of male fern recently occurred in the practice of Dr. Coghill, of Ceylon. The quantity given was *one ounce and a half*—half to be taken at bed time and the other half the following morning. Purging, vomiting and cramps came on, followed by symptoms of collapse, and the patient died 12 hours after taking the second dose. Dr. Coghill was misled by an error in "Naphey's Medical Therapeutics," where *ounce* is printed instead of *drachm* as the dose of this remedy.

A PLEASANT BEVERAGE.—Acidulated drinks are refreshing, especially in warm weather, but the constant use of lemons or limejuice is apt to interfere with the regular action of the bowels. Horsford's Acid Phosphate, with water and sugar, makes a delicious beverage, which allays the thirst, aids digestion and benefits the whole system. It also relieves the exhaustion following excessive mental or physical labor. Many prominent physicians have used it in their practice, and give it their unqualified approval.

THE ANTI-VACCINATION MOVEMENT.—The anti-vaccinationists do not seem to be making much progress in England, if one may be allowed to judge by their latest "moral victory." On the 19th ult., a motion by Mr. Taylor, member for Leicester, against compulsory vaccination, was defeated in the House of Commons by a vote of 286 to 16. The anti-vaccinationists, however, will probably

find consolation in the fact that the citizens of Basle, Switzerland, have voted by about five to one in favor of the abolition of compulsory vaccination.

MEDICAL COLLEGE FOR WOMEN.—Our respected contemporary the *Canada Medical and Surgical Journal*, in commenting on our remarks anent the woman's college, falls into an error in stating that it "is controlled by members of the faculty of the Trinity School of Medicine." For the information of our contemporary and others, we would say that not a single member of the Trinity staff has any connection with the female medical college.

MEDICAL EDUCATION FOR WOMEN.—It is announced that the Kingston Female Medical School has secured guaranteed subscriptions amounting to \$1200 per annum for five years, and that only \$300 more is wanted to complete the sum required. What about the Toronto Female School? McGill College, Montreal, is about to open its classes to women, so that female medical students in Canada will be amply provided with facilities for pursuing their studies.

INJECTION BROU FOR GONORRHOEA.—The following is the composition of injection Brou, a well-known proprietary medicine for the treatment of gonorrhœa:

Sulphate of zinc.....	100 parts.
Acetate of lead.....	200 "
Tinc. catechu.....	400 "
Wine of opium.....	400 "
Water.....	19,000 "

LEMONADE IRON.—The following will be found a most pleasant mode of administering iron to fastidious patients. The credit of it is due to Dr. Goodell, of Philadelphia:

R.	Tr. Ferri Chlor.....	5i.
	Acid Phosph. dil.....	3vi.
	Spts. Limonis.....	5i.
	Syrup ad.....	3vi.—M.

Sig.—A dessertspoonful in water after meals.

INVERSION OF THE UTERUS.—Dr. Clifton E. Wing, of Boston, read an interesting paper (*Boston Med. & Surg. Journal*) before a meeting of the Suffolk District Medical Society, on the treatment of Inversion of the Uterus. He recommends continued gentle pressure properly applied to the in-

verted organ. This is to be accomplished by some form of vaginal stem repositor held in place, and the pressure kept up by elastic bandages.

MONTREAL HOMŒOPATHIC MEDICAL COLLEGE.—The following are the names of the Faculty of the newly organized Homœopathic Medical College: Dr. Wanless, *President*, Medicine; Dr. Muller, *Registrar*, Obstetrics; Dr. Nichol, *Materia Medica and Medical Jurisprudence*; Dr. McLaren, *Physiology*; Dr. J. H. Fulton, *Surgery*.

APPOINTMENTS.—Dr. Fenwick, of London, has been appointed the representative of the Western University in the Ontario Medical Council, not Dr. Arnott, as stated in our last issue.

Dr. W. Stephen has been appointed physician to the Montreal Dispensary.

George W. Nelson, M.D. (Bishop's College Prizeman), Marbleton, Que., brother of Wolfred Nelson, M.D., of Panama, has been appointed Resident Surgeon of the Universal Interoceanic Canal Co.'s Hospital, Panama.

Dr. Augustus Jukes, of Regina, has been appointed Registrar of the districts of Touchwood, Regina and Souris, N.W.T.

Dr. T. A. Rodger, of Montreal, has been appointed surgeon to the Grand Trunk Railway, *vice* Dr. Scott deceased. This appointment is one we feel assured will give satisfaction both to the profession and the employés of the Company.

Prof. Robert Bartholow has been elected Dean of Jefferson Medical College, *vice* Prof. Elderslie Wallace, resigned in consequence of ill-health.

Dr. J. Corlis of St. Thomas, Ont., has been appointed Assistant Surgeon to the "Elgin" Battalion.

Dr. A. McDonald has been appointed on the acting staff of the Toronto General Hospital.

VICTORIA AND LAVAL.—The supporters of Victoria Medical School, Montreal—which is making a brave stand against the efforts of Laval University, backed by the Pope, to suppress it—evidently believe that Heaven helps those who help themselves. A member of the faculty, who modestly withholds his name, has contributed ten thousand dollars towards carrying on the fight.

ARCADES AMBO.—The *Medical Age* says: "We have a physician (?) right here in Detroit who avers

that angina pectoris is an excellent remedy in consumption." He must be a brother of the Toronto reporter who made a member of the Ontario Medical Association say that phymosis was an excellent remedy for chorea.

At a recent sale at auction of old government medical supplies, at St. Louis, amongst other things one man bought 17,308 pills for thirty-eight cents. A local paper says: "The books and instruments sold had been used before, but the pills were entirely new."

SUMMER SESSIONS.—The summer sessions inaugurated this year at the two medical schools in this city have been very successful. Sixty-two students are attending the clinical instruction at the Hospital.

F.R.C.S.—Dr. Robert Barnes has been elected a Fellow of the Royal College of Surgeons, Eng., his diploma of membership bearing date May 8, 1862.

PARLIAMENTARY.—We are glad to observe that our respected and worthy confrère Dr. Gaboury, of St. Martin, has been elected member of the Local Legislature for Laval Co., Que.

THE Massachusetts Medical Society has declined, by a vote of 62 to 58, to admit women to membership.

Books and Pamphlets.

THE PRACTITIONER'S READY REFERENCE BOOK. A Handy Guide in Office and Bedside Practice. By Richard J. Dunglison, A.M., M.D. Third edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston, Son & Co. Toronto: Willing & Williamson.

The fact that this work has passed through three editions in the comparatively brief space of six years would argue for it a wide and steadily maintained popularity. That it can be accepted as a criterion of the intrinsic value of the volume is more open to question. Taking into consideration that nearly one-fourth of the book is devoted to such points as dosage, incompatibles, prescriptions, and a bare synopsis of the treatment of diseases, the inference is permissible that on these subjects,

which every practitioner is supposed to have at his fingers' ends, Dr. Dunglison's readers and patrons are somewhat weak-kneed. For this, however, the author can in no wise be held responsible; his business is to grasp the condition of the market, and to cater to the existing demand; and, accepting as a fact the inferential view just propounded, he has done so successfully. Within the limits of some five hundred pages he has collected a mass of facts, figures and hints relating to every branch of the physician's and surgeon's art, and which, owing to their being widely scattered through various professional treatises, are not always easy of access to the busy practitioner. To the younger members of the profession, especially those who are just embarking in practice, the book is likely to be particularly serviceable; while older men, who have grown somewhat rusty in the minutiae of the teaching of the schools, will frequently find a consultation of its pages beneficial. We are inclined to think that somewhat more than its share of space has been assigned to *materia medica*, while other and equally important subjects have not received the full recognition they deserve. This, however, is easily remedied, and as each successive edition of the work has contained numerous additions, it will doubtless be attended to in the future. The value of the section on "Selected Prescriptions" would be materially enhanced were the source from which each formula was drawn appended thereto. Among the more valuable features of the work, to our mind, are the tables of the solubility of drugs in various menstrua, doses for hypodermic and other injections, for atomized fluids for inhalation, gargles, collyria, suppositories and enemata, many of which are not to be found in the pharmacopœias; also the hints for the use of galvanic batteries, and the selection and application of trusses—simple things in themselves, but which it is not every medical student's fortune to become familiar with during his apprenticeship. The dietetic preparations for the sick will also be found extremely valuable. The section on "How to prepare stained sections of animal tissues" (read before the Quekett Microscopical Club in 1879) seems to be somewhat out of place in a work of this kind; moreover the pathologist who endeavors to keep pace with the times will be apt to find the directions it gives somewhat old-fashioned. Upon the whole, however, the author has conscientiously

carried out the object he had in view, and has succeeded in producing a work of much value to the younger members of the profession.

A MANUAL OF AUSCULTATION AND PERCUSSION; embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism, by Austin Flint, M.D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc. Third edition, revised. Philadelphia: Henry C. Lea's Son & Co., 1883.

We heartily welcome the third edition of the work of this well-known teacher and writer. The book requires no comment at our hands, a mere mention being all that is necessary. It will be found without a rival on the subject upon which it treats.

ON CERTAIN PARASITES IN THE BLOOD OF THE FROG. By Wm. Osler, M.D., M.R.C.P., Lond., McGill College, Montreal.

ON CANADIAN FRESH-WATER POLYZOA. By the same author.

Both the above are reprinted from the *Canadian Naturalist*.

Births, Marriages and Deaths.

On the 6th ult., Constantine O'Gorman, M.D., of Hastings, to Eleanor, second daughter of A. McLean, Esq., of Walkerton, Ont.

On the 14th ult., Frederick LeM. Grasett, M.D., F.R.C.S. Edin., of Toronto, to Jane Stewart, second daughter of A. Thornton Todd, Esq.

On the 21st ult., G. H. Cowan, M.B., M.R.C.S. Eng., of Napanee, to Ida Alberta, eldest daughter of the late John Percy, Esq., Ernestown, Ont.

On the 20th of May, Dr. J. A. Sivewright, of New Westminster, B. C., aged 33 years.

On the 4th ult., Wm. Ruddick, M.D., of St. Martins, N. B., in the 67th year of his age.

At Quebec, on the 19th ult., Dr. E. Rosseau, aged 76 years.

* * * The charge for notices of Births, Marriages and Deaths is Fifty Cents, which should be forwarded in postage stamps with the communication.

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Original Communications.

PASTEUR ON THE ATTENUATION OF VIRUSES.*

TRANSLATED BY C. W. COVERNTON, M.D., M.R.C.S.,
TORONTO.

(Continued from page 325.)

I have now to deal with a new virus met for the first time under the following conditions: The year 1881 was remarkable at Paris for a very serious epizootic, that kind of affection known under the name of typhoid fever of horses; an omnibus company of Paris lost more than 1500 horses. We have commenced some researches on this disease which—unfortunately for our experiments—did not reappear in 1882. In inoculating rabbits with the frothy matter escaping from the nostrils at the moment of the death of the horse suffering from the affection in question, the rabbits died and their blood presented a new microbe in the form of the figure 8 with a lengthened intersection. This microbe communicates to the rabbits a veritable typhoid fever which kills them in less than twenty-four hours; the lungs are generally hepatized, with pleurisy, Peyer's patches are tumefied, sometimes of a raspberry red and hemorrhagic. The fold of the ileo-colic valve is always very much swollen and more often hemorrhagic than those of the intestine; the kidneys sometimes hemorrhagic; the liver often a little pale. The animal falls rapidly into a pronounced comatose state; after four hours inoculation, the fever is evidenced by more than one degree C. of elevation of temperature, even when death happens only after thirty-six hours; peritonitis is also a frequent concomitant. The attenuation of this microbe takes place when cultures in

broth are exposed to the contact of the air; but it is difficult to seize, because the period during which it displays itself is followed almost immediately by the death of the microbe. In other words if a culture of this microbe is made and abandoned to the contact of the air, in trying each day its virulence, this is shown to be always mortal for the rabbits until all of a sudden the culture is found dead, that is to say no longer capable of being cultivated and without any action upon animals. In cultures in contact with air the culture passes from virulence to death in from fifteen to thirty days if it is left at a temperature of 35° Cent. On the contrary developed at 35° and left at the temperature of the ambient air, the cultures were preserved six or eight months. *In vacuo* the cultures are preserved virulent for at least a year, whether at the stove or at ordinary temperature. For success in seizing and fixing attenuation, we have had recourse to the following artifice which will call to mind that which we have recently described for demonstrating that it is truly to the oxygen of the air that is due the attenuation of the microbe of charbon at 43° Cent. A culture was made by aid of the virulent blood of a dead rabbit, and it was left to itself; each day a new flask of broth was seeded so as to have as many cultures as days of rest of the first mother culture. A time arrives when the seeding of this mother culture shows itself to be sterile; arrived at this point we take as mother culture of a new series of daily cultures, the culture made on the eve of the death of the first mother culture. The second mother culture dies in its turn: then we remake a new series of daily cultures by taking for the mother culture the fecund culture of the eve of the death of the second mother culture, and so on progressively. By this method we finish by procuring cultures which do not occasion the death of the rabbits, but are limited to the occasioning of curable abscesses, the development of which is sometimes enormous. At this time it is easy to pronounce that we now have to do with vaccinal viruses, that is to say, that the convalescent rabbits will now bear without injury the most virulent cultures of the microscopic organism of the typhoid fever of rabbits. The vaccinal cultures made at short intervals preserve their vaccinal virulence. The proof of the influence of the oxygen of the air in the attenuation is again furnished by the cultures;

*Delivered before the Ontario Medical Association at Toronto, June, 1883.

in vacuo, or protected from the influence of the air, they preserve their virulence and only die after a very long time, manifesting that virulence up to the death of the culture. To resume, it cannot be doubted that we possess a general method of attenuation, the application of which should only be modified according to the exigencies of the physiological peculiarities of different microbes. The general principles have been discovered, and we cannot withhold our belief that in the future this order of research will be full of hope; but however splendid the demonstrated truth may be, it does not always enjoy the privilege of being readily accepted. I have met in France and elsewhere obstinate opponents. Allow me to choose among them one whose personal merit has the greatest right to our attention; I mean Dr. Koch, of Berlin. There appeared at Berlin a year ago, the paper entitled "Collection of the Works of the German Sanitary Office." My labors are there attacked with a strange vehemence by Dr. Koch and his pupils. Truly surprising things are to be found in certain papers in this collection; it is in divers places insinuated that M. Pasteur does not know how to cultivate microbes up to a state of purity, that he cannot know whether his works are exempt from causes of error, because he is ignorant of the manner of recognising micro-organisms, that he has deluded a school of medicine to publish "incredible facts" as to cultures. It is there stated that the method employed by me for inoculation consists in injecting under the skin one or several syringes full of liquid, that I have never had on hand pure septicæmia without a complication of other diseases, that I have incorrectly applied the word septicæmia, that he (M. Koch) approaches much nearer to the truth in calling it malignant œdema, that M. Pasteur does not know how to recognize the septic vibrio though he may have discovered it. In the experiments of charbon communicated to fowls by the sole fact of lowering their temperature after inoculation, Dr. Koch, who finds nothing remarkable in this experiment, asks whether the fowls under the lower temperature who became inoculated with charbon, were not capable of taking it naturally, because, said he, a German author in inoculating fowls with charbon obtained eleven times in thirty-one positive results. That is an assertion that Dr. Koch would have done well to have refrained from mak-

ing before establishing objections against the truth of very exact observations. The pupils of Dr. Koch have outdone their master; we find, for example, in their papers, that the only certain guarantee of the purity of the cultures is incessant control by medium of a microscope, which is impossible with Pasteur's cultures. Another stronger passage concerning the attenuation of viruses. It is M. Loeffler who speaks: "When in the experiments of Gaffky, the cultures have presented an uncertain action, an attenuation of the virus, there existed always an adulteration by very analogous organs of rapid growth, but not pathogenic." M. Loeffler is, nevertheless, more indulgent than his master and than his colleague, M. Gaffky; he does me the honour of saying that he is disposed to believe that my cultures were pure, but do we know? In the mind of the writer that which might have led me into error is that the adulteration of my cultures commenced with the vaccination. "The air of a laboratory," said he, "devoted for long years to investigations for bacteria, is full of an enormous mass of germs; is it not possible that a germ may have become placed on the vaccinating needle, the more probably so that he had occasion frequently to try the virulence of the cultures? It is this which would have made me admit the attenuation of the virus of fowl cholera." This is not all, when I think I have in my hands fowls vaccinated, the writer imagines that I could have taken for such fowls, fowls which were simply non-receptive of fowl cholera. Finally, the writer does not believe that I have operated, as I have stated, on 80 fowls in some of my experiments, because that would have involved an expenditure of too much money. It is true, that to establish the great fact of the attenuation of virus, the State has permitted me to have been regardless of cost. Perhaps in this assembly some persons may entertain the opinions of my opponents; I beg to invite them now to state their objections, I shall be happy to enlighten them.

M. Koch, of Berlin, ascended the platform, and in German made the following brief remarks, which were thus immediately rendered into French by M. Hultenhoff: "Having learnt by the programme of the Congress that M. Pasteur would speak to-day on the attenuation of virus, I have repaired to the sitting in the hope of learning some new facts on a subject which interests me in a high degree.

I must confess that I have been disappointed in this expectation, and that there is not in the communication of M. Pasteur anything that is new. I do not consider it necessary to reply here to the attacks of M. Pasteur for two reasons—first, because the points in dispute enter only indirectly into the domain of hygiene properly so called; and, secondly, not being sufficiently versed in the French language, and M. Pasteur not sufficiently in the German, we could not here engage in a profitable discussion. I reserve my reply to M. Pasteur for the columns of the medical journals.”

M. Pasteur replied to M. Koch that if he had been able to follow the lecture he had just delivered, he must have been convinced that new facts have to-day been demonstrated; that he would tranquilly await the reply of M. Koch, and reserve the right also of replying if there were need for so doing.

M. Sormani, of Pavia, said that the discoveries of M. Pasteur had filled the scientific world with his renown, and had opened new fields for study and observation. Italy had welcomed this discovery as a great blessing for human and veterinary hygiene, for agriculture, for national wealth, equally as for science.

A member of the commission which superintended Charbon vaccination at Milan, and president of the commission that performed them at Pavia, said, “I will relate briefly the conclusions arrived at on the experiments accomplished in Italy. As soon as the commencement of the current year, the Minister of Agriculture sent Professor Perroncito to Paris to learn the method of charbon vaccinations after the method of M. Pasteur. M. Perroncito immediately commenced the study; the veterinary schools of Milan, of Turin, of Bologna, of Pisa did the same. At Pavia we undertook the charbon vaccinations; at first all the experiments were not attended with favourable results—in some cases the animals died as a consequence of the vaccination; in some others, animals vaccinated and re-vaccinated died during the trials of control. We must seek the reasons for these failures; the first fault is that of having employed the vaccine of the ox for vaccinating small animals, as rabbits, guinea-pigs, white rats, and sheep, which are the most sensible reactives of the charbon virus. That which is vaccine for a resisting animal, as for example the horse, is poi-

son for an animal of feebleness resistance and kills it. It is not only the quantity that has to be precisely determined, it is especially the quality, although the quantity also may be an element that must not be neglected. A second source of error has been the proof of control; we have seen revaccinated animals die, but if we carefully investigate the history of these animals we shall find that as a rule they had not shown febrile manifestations after these vaccinations; they might really be considered as non-vaccinated animals, because they had not experienced the ordinary effects of vaccination. At Bologna, following the relation of Professor Gotti, of six sheep vaccinated four died; but if we investigate the table of temperatures which were registered after the two vaccinations, we shall find that only the two sheep whose temperature exceeded 41° C. survived; all the others, whose temperature after vaccination did not reach 41° , died. From this fact we may conclude, that we ought always to take the temperature of animals after each vaccination, and especially after the second, and that it is necessary to revaccinate a third time all the animals who have not shown a manifest access of fever; this is one of the last precepts given by M. Pasteur. In some cases there have been obtained, as at the Veterinary School of Turin, fatal results to almost all the animals in the experience of the virus of control. We may consider that, in these cases, with the charbon virus septic virus has been inoculated, and as the latter is stronger than the former, in the struggle it remains conqueror. Animals, although vaccinated with the power of resistance of charbon, may sometimes fall victims to the bacteria of septicæmia. None of these accidents have happened in the experiments performed by Professor Perroncito, at Turin, at the city of Rizzetti, and at Strambino, nor in the experiments that we made at Pavia. We operated always with the thermometer and the microscope in hand; we have, nevertheless, stumbled over another source of difficulty—it was the third possible case. The vaccinated animals did not die, neither during vaccination, nor after proofs of control, nor even after the trials of control of animals pure from vaccination and from charbon. When we experimented on ovine animals, the experiment succeeded easily and well; but when we experimented on bovine animals, the result of the con-

trol was almost always the recovery of the victims. It is true that the designated victims have always a strong fever and experience a local reaction and a phlegmonous tumor; but they do not die, at least this is so in the generality of cases. This same result has been obtained by M. Pasteur, who in his experiences of control has verified the resistance of bovine animals to charbon artificially inoculated, that charbon artificially inoculated is not so serious for oxen as spontaneous charbon. This may be dependent on two causes. The organ primarily affected during natural charbon is always the intestine, the stomach, or some internal organ indispensable to life, whilst the inoculation of artificial virus is made in the subcutaneous cellular tissue. Animals in a state of nature infect themselves with charbon on account of their proclivity to this disease, a disposition which for other animals of the same species is feeble or nil. But in experimenting we cannot always choose the animals the most predisposed, but have to take them on the chance. Animals that have recovered after this malady, local or general, have become refractory to charbon; this is a manifest proof that the anterior malady was really charbon. I can then announce that the experiments on the vaccination of charbon have had in Italy the success of a true scientific control, accomplished by the most rigorous methods, without blind enthusiasm, and without preconceived and false ideas, but with most satisfactory results.

M. Pasteur desired to make a few remarks on the communication of Professor Sormani. In the first place he was not aware that the vaccine sent by him had been used on rabbits and guinea-pigs, who are much too sensible to reactives; it is necessary always to proportion the strength of the vaccine virus to the animal to be experimented on, and the vaccine sent to Italy was only fit for the ovine and bovine species. Nothing easier than to procure it suitable for rabbits and guinea-pigs. As a consequence the experiments in vaccinating at Turin had succeeded badly. This want of success may very easily be explained, for it was the blood of a sheep having succumbed to charbon more than twenty-four hours that the inoculation had been made from. In this case the septic vibrio had been inoculated at the same time with the bacteride, and as the first kills more rapidly than the second, it is evident that the animals suc-

cumbed to septicæmia. The same thing may happen to human vaccination when it is made without care, the different viruses inoculated each evolving its particular results. It is necessary to take the greatest precautions for charbon vaccinations, especially when we are operating on a species as sensitive as the equine. M. Pasteur has seen in a series of vaccinations made during one day on sheep, the last on a horse, this terminated by septic death of the animal on account of the remaining virus in a tube which had been uncorked all day and used all day. To resume, great precautions in the technique of vaccination are necessary, and the strength of the virus must be proportioned to the species on which experiments are made. In all cases the statistical figures are to-day very encouraging for the method, since among the vaccinated animals there have died only one sheep in 300, and one ox or animal of the bovine race in 200.

THE BACILLUS TUBERCULOSIS IN ITS PRACTICAL BEARING ON THE DIAGNOSIS, PROGNOSIS, AND TREATMENT OF THE DISEASE.*

BY J. E. GRAHAM, M.D.

Ever since the discoveries published by Dr. Koch more than a year ago, pathologists have been busily engaged, first, in testing the genuineness of the discovery, and secondly, in placing a proper estimate on the presence of these bacteria in the diagnosis, prognosis, and treatment of consumption.

With regard to the first point, the genuineness of the discovery, it must be admitted that so far the great majority of the more distinguished pathologists have, by their investigations, strengthened the position taken by Koch, viz.: that the bacilli described by him are peculiar to tuberculosis, and that they are immediately connected with the production of the disease. The few who have arrayed themselves in the opposition are, as he himself asserts, with two or three exceptions, men who have paid more attention to clinical medicine than pathology, and are for that reason unable to conduct these investigations with the delicacy and skill which are absolutely necessary in the solution of a

* Read before the Ontario Medical Association.

question of this nature. When it is considered that Koch continued his investigations for two years after the discovery was made, before he published it, having at his command every facility for the proper carrying on of his work, and having at the same time a knowledge of bacteriology, perhaps superior to any existing scientist, one is surprised that men who have worked perhaps with interruptions for a few months, with very poor advantages, at a subject about which their previous knowledge was not very extensive, should be so ready to oppose themselves to the great discoverer. It may be safely said that the discovery has held its ground against any assaults which have been up to the present made upon it.

It is however with the practical aspect of the question that we, as physicians, are principally interested.

(1) Can phthisis be diagnosed by means of the presence of bacilli in the sputa? (2) Has the number of bacilli any relation to the prognosis? (3) Has the discovery aided us to any extent in the prevention and treatment of this formidable disease?

In answer to the first question, it might be said that a number of investigations have been made, and the result has been in the affirmative, that we can diagnose the presence of this disease, even in cases which would remain doubtful with our ordinary means of physical examination. You all know how difficult it is sometimes to diagnose phthisis from chronic bronchitic cirrhosis of the lungs. In cases of this kind, the discovery of the bacillus would be a sure evidence of phthisis. The most important investigations which have been made so far, are as follows:

Balmer and Fräntzel (*Berliner Klinisch Wochenschrift*, 1882, No. 45) examined the sputa in 120 cases of phthisis and in that of all of them found bacilli. In cases of chronic bronchitis they found none. They found the organisms most abundant in acute cases, and in those rapidly progressing. Prof. D'Espine, of Geneva, found the bacilli in the expectoration of twenty cases, in whom the diagnosis of phthisis had previously been made. They were absent in five cases of chronic bronchitis, with emphysema. As the result of his experiments, Prof. D'Espine does not think that the number of bacilli is in proportion to the severity

of the disease. He, however, is of opinion that they are always present in phthisis, and that several examinations should be made on different days, before the absence of bacilli should be considered certain. Dr. Kowalski, in a paper read before the Medical Society of Vienna, stated that he has since May 1st, 1882, examined the sputa from 600 patients, and that he had not in a single case found the bacilli where tuberculosis was not present. He considers the presence of bacilli to be a sure indication of phthisis, and that the number is in direct proportion to the severity of the disease. Dr. Pfeifer, of Wiesbaden, in the *Berliner Klinische Wochenschrift*, confirms the opinion of previous observers, viz.: that the bacillus is always present at some time or other in the sputa of the tuberculosis, and that they vary in number and size in direct proportion to the severity of the disease. In England, pathologists and physicians in practice have interested themselves very much on this subject. Dr. West, at a meeting of the Pathological Society of London, gave the following conclusions reached after the investigation of over fifty cases:

(1) That bacilli were found in the sputa of all cases of phthisis in which there was excavation, and that they varied in number with the rate of destruction. (2) That the arrangement in groups and masses indicated greater destruction than if the bacilli were isolated, unless the isolated bacilli were in great numbers. (3) That he had detected no variation in size of the bacilli in different cases. (4) That the bacilli being in his opinion evidence of destruction of the lung, they might, in some doubtful cases, be of diagnostic value, but that in most cases they were merely an additional confirmation of what was already clear from physical signs, and the same was true as regarded prognosis.

Dr. C. Theodore Williams read a paper at a meeting of the London Medical Society, February 12th, 1883. He, with his assistants, examined the sputa from 130 different cases. The results of his experiments agree with those already given with regard to the specific character of the bacilli. The fact that none were found in cases of bronchitis, in which the expectoration was extremely foetid and abundant, separates the tubercle bacilli from the numerous organisms connected with fermentation and decomposition. As to the bearing of these on the prognosis of the disease, he does not

think there is any definite ratio between the activity of the disease and the number of bacilli, though as a rule they are few in cases where the disease is quiescent. Dr. Whipham gave the results of the examination of twenty cases. They corresponded with those obtained by Balmer and Fræntzel. Dr. G. A. Heron gave the results of the examination of the sputa of sixty-two cases. They were similar to those already given. The general opinion of members of the London Medical Society appeared to be that bacilli were always found in cases of tuberculosis and in that disease alone. Also, that they varied in number in proportion to the severity of the disease.

In America, pathologists have interested themselves more in the question of the etiology of the disease. No series of investigations have so far been made to show the bearing which these bodies have on the diagnosis and prognosis. In order that I might satisfy myself on these two points, I examined the sputa of forty consecutive cases. The method of staining employed was Ehrlich's. The specimens were allowed to remain in the staining fluid about three-quarters of an hour at 100° F., and afterwards mounted in Canada balsam. In the majority of the cases the sputa was brought from the hospital by Mr. Patterson, and examined before I had seen the case. The experiments were conducted in this way so as to leave the mind fully unbiased. Of the forty cases, in about twenty the staining was done by myself, in seventeen it was done by Mr. Patterson, and in three by Mr. Foster. I examined all the slides myself, and also examined most of the patients. I will now give you a brief history of these cases, together with the results.

Case 1.—Mr. S., my own patient. Physical signs show consolidation of a portion of the left lower and of the right upper lobes of the lungs. The disease is of four or five months' standing, and advancing rapidly. On the first examination the bacilli were found in limited numbers, on the second they were found in large numbers.

Case 2.—Miss G., my own patient. Case of rapid tuberculosis of three or four months' standing. Other parts of the body affected as well as the lungs. Few bacilli were found on first examination, but the second proved them to be present in large numbers. Between the times of these two examinations signs of breaking down of the lungs commenced.

Case 3.—Sputa sent by Dr. Cameron; case of advanced phthisis; patient has since died; bacilli found in very large numbers.

Case 4.—Sputa also sent by Dr. Cameron, with the following history: Patient's father, mother, two brothers and two sisters died of phthisis. One brother living is subject to slight cough. In his own case the disease is of three years' standing; slight hemorrhage at different times; pulse, 124; temperature, 101; bacilli found in large numbers.

Case 5.—J. F., ward 13, T. G. H. No history accompanies this case; said to be one of phthisis; bacilli were not found.

Case 6.—B., ward 14, T. G. H. Has had cough more or less for three years, and has lost flesh; expansion diminished on right side; evidences of consolidation; bacilli were not shown satisfactorily.

Case 7.—C., phthisis. No history; bacilli found on third examination.

Case 8.—J. T., T. G. H. Patient has cough; purulent sputa; evidence of consolidation; night sweats, loss of flesh, etc.; bacilli found in limited numbers.

Case 9.—W., ward 5, T. G. H. Fifteen months standing; tuberculosis in both lungs, with pneumothorax; patient has since died; bacilli found on third examination in limited numbers.

Case 10.—Miss B., T. G. H. Patient died the day after the sputa was obtained; disease was undoubtedly phthisis; made two examinations and found no bacilli. It is probable that in this case the sputa came from the throat and not from the lungs, as the patient was very weak.

Case 11.—D., T. G. H. Has had cough for the last five years, and has expectorated blood occasionally during the last two years. The whole of the right lung is involved, and part of the left; bacilli found in large numbers on third examination.

Case 12.—J. B., T. G. H. Had an attack of pleurisy five years ago; has not been well since; shortness of breathing; not much expectoration, with greatly diminished expansion on the right side; dulness on percussion on the same side, with diminished breathing sounds; puerile breathing on left side; two examinations made; no bacilli in either case.

Case 13.—McG., Dispensary patient. Sputa sent by Mr. Foster; phthisis; bacilli were found in large numbers.

Case 14.—G., Dr. Stewart's case. Patient caught

cold seven years ago, and has been ill ever since ; night sweats ; left lung involved ; signs of cavity in the left infraclavicular region ; bacilli not numerous, but very distinct.

Case 15.—T. W., ward W., T. G. H. Cough for six months ; left lung involved, with signs of breaking down ; bacilli found in very large numbers.

Case 16.—C., T. G. H. Upper part of left lung is diseased ; not much breaking down ; disease pursuing a chronic course ; bacilli found in moderately large numbers.

Case 17.—J. R., advanced phthisis. Patient has since died ; bacilli found in large numbers.

Case 18.—Sputa sent by Dr. Burns. A case of advanced phthisis ; bacilli found in very large numbers.

Case 19.—F., T. G. H. Phthisis of six months' duration ; both lungs are affected ; patient died the day after the sputa was obtained ; bacilli not very numerous.

Case 20.—Mrs. L., my own patient. Chronic bronchitis, with dilated bronchi ; no bacilli were found, although two examinations were made.

Case 21.—Mrs. R., my own patient. She has suffered for years with chronic sub-cutaneous abscesses ; suspect tuberculous deposit in the apex of the left lung ; no bacilli were found, although three examinations were made.

Case 22.—C. my own patient. Suffering from slowly advancing phthisis ; the bacilli were not numerous, but distinct.

Case 23.—B., T. G. H. A case of chronic bronchitis, with dilated bronchi ; no bacilli ; three different examinations were made.

Case 24.—M. T., a patient suffering from advancing phthisis ; lungs breaking down ; mother and brother died of the same disease ; bacilli found in moderately large numbers.

Case 25.—M. S., my own patient, suffering from acute bronchitis, since recovered ; no bacilli.

Case 26.—Mrs. D., also under my care. She has had cough for some years. This winter she has shown signs of phthisis. Bacilli, not numerous, and small but distinct. In this case the finding of bacilli was a material aid in diagnosis.

Case 27.—C., T. G. H. Left apex involved, other parts of the lungs healthy ; bacilli not numerous, but distinct.

Case 28.—T. G. H. Patient suffering from em-

physema and subsequent development of phthisis ; bacilli found in moderately large numbers.

Case 29.—Large part of left lung involved ; disease of a year's standing ; bacilli not numerous, but distinct.

Case 30.—This and the two following cases were given me by Mr. Foster, who prepared the slides. Dr. S. since died of phthisis ; rapid disease ; bacilli numerous.

Case 31.—Patient from House of Providence. Case of phthisis ; bacilli numerous.

Case 32.—Also from House of Providence. Diagnosis doubtful ; bacilli not distinct, if seen at all.

Case 33.—G. came to me for consultation ; rapid tuberculosis, with few physical signs in the lungs ; bacilli not numerous but distinct. In this case the discovery of bacteria was of great assistance in the diagnosis.

Case 34.—B., my own patient. An undoubted case of phthisis of two years' standing ; bacilli not numerous but distinct.

Case 35.—S., T. G. H. Patient suffering from phthisis ; bacilli not numerous.

Case 36.—C., T. G. H. Has had cough for the past two or three years ; has lately lost flesh. Examination of the chest revealed the presence of bronchitis and emphysema. No bacilli.

Case 37.—N., T. G. H. Decided phthisis of ten months' standing ; bacilli numerous.

Case 38.—T., T. G. H. Case of phthisis. No history ; bacilli not numerous, but distinct.

Case 39.—C. B. Phthisis ; bacilli numerous.

Case 40.—C. G., T. G. H. Phthisis of ten years' standing, which is now in an advanced stage ; bacilli numerous. On examining these reports it will be found that thirty-three were decided cases of phthisis, three were of doubtful diagnosis, and four were cases of bronchitis, acute and chronic. In the thirty-three cases positively diagnosed as phthisis, in thirty-one bacilli were unmistakeably found ; in one they were not distinctly shown, and in one (No. 10) they were not found at all, probably for the reason already given, that the patient was too weak to expectorate from the lungs. In the four cases of bronchitis no bacilli were found, and they were also absent in the three cases in which the diagnosis was doubtful. The undecided character of the diagnosis in two or three of the cases was owing to their having left the hospital.

In the great majority of cases the bacilli were found on the first examination, but in many, two, three, and even four trials were made before they were found. These investigations are of more value, as they were made by one in general practice, without any of the great facilities which belong to a pathological laboratory. They thus demonstrate the possibility of practising physicians using this as an additional means of diagnosis. Within the last two or three months Mr. Heneage Gibbs has discovered a much more rapid and simple means of staining, which will tend to its further use by the profession.

The following conclusions might reasonably be arrived at from these experiments :

(1) That bacilli are found in the sputa of almost, if not all, cases of phthisis. It is doubtful if there is any case of active disease in which bacilli will not be found, provided the sputa comes from the lungs, and five or six different examinations are made. (2) They are found on the first examination in three-fourths of the cases. (3) The presence of the bacilli is a positive evidence of the disease. (4) There are doubtful cases in which the examination of the sputa for the bacilli will be of decided value in arriving at a correct diagnosis. In three or four of the cases given the presence or absence of bacilli was to me of great assistance. (5) As to prognosis, the number of bacilli is in proportion to the amount and rapidity of the process of destruction. There are cases in which there is a rapid formation of miliary tubercle, in which the sputa will show a small number of bacilli. As soon, however, as in such cases breaking down commences, the bacilli will be found in very great abundance. This fact was shown in No. 2. (6) It might be said, as a general rule, that in the more chronic cases the bacilli are fewer in number and, I think, smaller. I must here express my thanks to Mr. Patterson for his valuable assistance in staining so many specimens.

Has this discovery had any influence on our treatment of the disease? Yes, in two particulars, the prevention and the cure. A most ridiculous argument has been used against the contagion theory of phthisis, that, if it is proved to be correct, consumptive patients will not receive that care and attention from relatives as at present. There are very many ways by which the attendants on cases of phthisis could guard themselves from the

disease without relaxing their efforts in administering all the comfort possible to the patient. Rooms could be better ventilated, sputa ought to be disinfected and frequently removed. The attendants, more especially if they also are predisposed to the disease, ought to take sufficient outdoor exercise and try in every way to keep in a good state of health.

The results of experiments made on the lower animals with regard to this subject of contagion are in my opinion as conclusive as it is possible for them to be. Altogether apart from these, however, there is sufficient clinical evidence to support this theory. In my short experience as a practising physician, I have seen enough to convince me of the strong probability of contagion in this disease. I have for instance observed the following case. A young man of scrofulous family, a young woman of a strong healthy family and one noted for the longevity of its members. Two or three years after marriage her husband became phthisical, and died after six months illness. His wife, who attended him faithfully during his illness, in a few months afterwards developed the same disease, which pursued a rapid course and terminated fatally. She was the only one of her family who suffered from phthisis. My friend and former teacher, Dr. Richardson, of this city, who for the last thirty years has been a strong believer in the contagiousness of consumption, arrived at his conclusions entirely from clinical evidence. The following remarkable case came under his observation: A young lady, the youngest of a large family of very healthy children, became very much attached to a friend who was suffering from phthisis. For two months she was her sick friend's constant companion and slept in the same room. Shortly after the death of the latter, she too exhibited signs of tubercular disease, and died within a year. The tuberculosis developed itself in her case very gradually, almost imperceptibly, showing that it was not the result of catarrhal pneumonia. Now this young lady was the only member of that family who was known to have had phthisis, in fact a remarkably healthy record had been shown for generations back. She was as strong and healthy as the others previous to her stay with this consumptive patient. Is it not extremely probable that if this young lady had not come in close contact with the disease she would never have devel-

oped it? Would it not be proper, with our present knowledge, to forbid such close intimacy which to all appearance was the cause of disease and death.

A mother suffers for some months and dies of phthisis. Two grown-up daughters wait on her. A short time afterwards the elder becomes consumptive and dies before the year is out; she is followed by her younger sister. A brother and sister who at that time were children under ten years of age, were all that remained with the father. They, on account of their age and lively dispositions, were very little with their mother or sisters. One would suppose that the younger who was born a few years before his mother's death would be especially delicate. It was generally predicted that these two would follow their sisters when they arrived at the same age. This was not the case. They are now long past twenty and in very good health. They are liable of course to contract the disease if they should come in contact with it. Take another case, a family living in western Ontario, five of whom died of phthisis one after another. A brother who left home shortly after the first case appeared, escapes the disease and is now healthy and strong. These are but a few of the many instances which I could give to support the probability of the contagion of phthisis. You may ask how it is that in such a place as the Brompton Hospital, nurses and physicians should have lived so long in the building and not have taken the disease. In order to understand this, one requires to study the peculiarity of bacteria in the etiology of disease. Some forms are exceedingly delicate and will only grow between certain degrees of temperature and on a particular kind of soil. Take for instance the *Microsporon furfur*, the parasite producing that disease of the skin Pityriasis Versicolor. According to Dr. Thinn's investigations, this will grow only in a certain range of temperature, and he experimented for weeks before he could find a soil in which he could successfully cultivate it. Such is also the case with the bacteria of tuberculosis. There is no doubt but that certain individuals possess a predisposition to the disease, and there is no doubt also but that close damp houses afford an atmosphere in which these germs luxuriate.

It is difficult to understand why very distinguished London physicians should be so opposed to the contagion theory. There are two reasons

for this. They are as a class very conservative and perhaps slow to accept new views or theories. Consulting physicians have not the same opportunity to watch the course of the disease in families as the general practitioner. The instances of contagion in my opinion are as plain as those of typhoid fever, leprosy, or even syphilis. How many are exposed to the contagion of typhoid and do not contract the disease. It is probable that the germs of this malady are at all times floating in the atmosphere near the ventilators of sewers, and yet how comparatively few take the disease. The history of leprosy is a remarkable example of how the whole profession may be misled by the opinions of a few distinguished men. This disease was considered contagious beyond all doubt by the ancients and those of the middle ages. In modern times Hebra and a few others of note from necessarily limited observation gave the opinion that the ancients were wrong, that the disease was not contagious; but at the present time, as the result of experience on this continent and the islands of the Pacific, the profession is rapidly returning to the old view, viz.: that it is contagious, and that cases should be isolated. Thus it is seen that the arguments deduced from experience in consumption hospitals are not so strong nor as convincing as one would at first suppose. Another feature in the etiology of phthisis and one difficult of explanation is shown in the following case: A woman of tubercular parentage marries a man with similar antecedents. Nine children are born to them, every one of whom died of tubercular disease, some in the earlier years of tubercular meningitis and tabes mesenterica, while others at eighteen or twenty years of age died of pulmonary phthisis. In such an example it is difficult to understand how the children could become tuberculous at so early an age from outside influence. It is possible that they might have been infected through their mother's milk, or from the milk of diseased cattle. Dr. Watson Cheyne, in his experiments as given in the April number of the *London Practitioner*, found that when inoculations were made on pregnant animals the tubercular disease was not conveyed to the foetus in utero. This is a point which needs further investigation. These are certainly cases in which it would appear that the germs might have been reproduced in this way.

As a result of this discovery it may be asserted

that physicians are now more careful in the disinfection of sputa, ventilation of sick rooms, and in warning healthy members of a family from intimate contact with the disease. If on the outbreak of the disease the one affected were immediately sent to a warm equable climate, we would not have the sad record of a whole family falling victims to this dreadful scourge.

The inhalation treatment is the direct outcome of the germ theory of phthisis. A paper was read at the last meeting of the Association by Dr. Philp, in which the records of successful cases were given. In England there is a difference of opinion on this point. The experience of some has been negative, while others have had very good results. In my own experience I have found respirators of benefit in allaying cough, but have seen no positive results in the cure of the disease.

A CASE OF ACUTE TRAUMATIC TETANUS; EXHIBITING THE EFFECTS OF COMPLETE INSULATION OF THE WOUND BY NEUROTOMY.*

BY WM. BURT, M.D., PARIS, ONT.

The young woman I bring before you to-day is one of two cases which are reported in the *New York Medical Journal* for June, 1876, as having suffered from acute traumatic tetanus. It is now seven years since the report was made, and nearly eight years since she suffered from that disease, which may be ranked with the most formidable and distressing that come under the notice of the surgeon. My apology for presenting her to you at this meeting, although a report has already been made, is that a presentation of the patient, which has not heretofore been done at any association, is often of more benefit than simply a rehearsal of the history or a drawing on paper, no matter how skilful the artist. Another reason is that I have a second edition of the article referred to to offer you. I shall not detain you with any lengthy history, but allow you to read and observe for yourselves. The method of operating which I wish to speak of consists in completely insulating the tetanic wound, when occurring in the extremities, by neurotomy, performed on the main nerve or nerves leading to the wound, and by means of a transverse incision dividing the superficial sensory

nerves that also supply it. This will completely insulate the wound, as I claim to have done in this case, and which I claim may be done in many cases that come under the notice of the surgeon. The operation I performed on this right arm was the insulation of a wound on the radial side of the forearm by dividing the musculo-spiral nerve at the bend of the elbow, and the sensory cutaneous nerves by a transverse incision lower down. I made the remark in my first report that I considered amputation uncalled for, unless for other reasons, save in the case of the fingers and toes. To this I now take exception and would have erased that part which refers to the phalanx, as I believe better results will follow complete insulation of the parts higher up by neurotomy than by amputation. I wish also to point out to you that whereas I operated on the third day of the disease, I would now operate immediately on recognizing the case to be one of acute traumatic tetanus.

One word in reference to nerve-stretching, which has been introduced in recent years as a treatment for this disease. I do not know that this operation has received a more classical name; it may be that it is still upon its trial and not ready for a classical baptism. However, as far as the history of nerve-stretching in traumatic tetanus goes, it does not appear satisfactory to me. It does not appear that you can completely insulate a wound in the extremities by this method. Any surgeon can perform the operation of complete insulation by neurotomy, but I believe many surgeons, after performing the operation of nerve stretching, would not feel sure that the nerve was rightly stretched, if we are justified as yet in using the word rightly at all here. It is still further shrouded in such terms as "moderate traction," "a considerable degree of force is to be exerted," and "in tetanus it may do good by diminishing the excitability of the different nerves." My reason for presenting you but one case operated on is that I know of no other operated on in a similar way, and it may never be my lot to have another. Many surgeons are often for a long time without a case of acute traumatic tetanus, and then again two or three may present themselves close together. On account of the fatality of the disease, anything that would promise any hope of relief I claim we would be justified in resorting to. In the issue of April 21st of the *London Lancet*, Mr. Geo. Lawson, of

* Read before the Ontario Medical Association.

the Middlesex Hospital, is responsible for the following words in a description of a case of acute traumatic tetanus:—"The following case is an example of acute traumatic tetanus, a disease from which a patient very rarely if ever recovers." And the same opinion I heard given by one of our celebrated American surgeons, when standing by the bedside of a youth suffering from the disease. The latter opinion was given thirteen years ago, the former but to-day, as it were, so that during the last decade the prognosis of acute traumatic tetanus has changed but little, if any. This, Mr. President, is my apology for presenting you this case to-day, a case in which the operation of complete insulation was followed with immediate and satisfactory results. The spasms prior to the operation came on every few minutes. After the operation they were much less in severity, and ranged from twelve to five a day during the following week. Within three months after the operation, she returned to her work at the factory, having nearly recovered full use of her arm. The operation was performed under chloroform and with the aid of Esnarch's bandage, both of which are helps, I believe, in relieving the tetanic spasms, but helps not to be relied on to the exclusion of complete insulation by neurotomy performed at the earliest opportunity.

Correspondence.

SPLINT FOR THE FOREARM.

To the Editor of the *Canada Lancet*.

SIR,—In regard to the discussion at the last meeting of the Ontario Medical Association, held in Toronto, regarding a splint for the forearm, some of the speakers maintained that it was impossible to preserve the normal width of the interosseous space by any splint or appliance. I understood that Dr. McNaughton claims (and I say justly too,) that if we secure the normal curve of the forearm and press closely towards the interosseous space that there can be no deformity in fractures near the lower end of the radius. After giving the splint a fair trial in six consecutive cases of Colles' fracture, I am satisfied that I have had better results than with any splint I formerly used. I consider it maintains the normal curve of the forearm, and

fixes the hand in a natural position with a facility and certainty that leaves nothing to be desired in the way of a retentive appliance.

A. H. MCKINNON.

Hillsburg, June 25, 1883.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

Regular meeting May 17th, the president, Dr. Graham, in the chair. The treasurer, Dr. Spencer, presented his report—referred to the Council for audit.

Dr. McPhedran presented the following case. A woman æt 40; mother of eleven children, twins being born on two occasions; miscarried twice, each of these also twin pregnancies; nursed the first three children. Fourth child was nursed till three months old, when the mother's face and legs began to swell. By the fifth month the face was so swollen as to "bury the ears" and the eyes were almost closed. The swelling was hard and smooth, and the whole face of a purplish color: a hard swelling as large as an English walnut on the right frontal eminence. She was unable to lie down owing to rushing sensations in the head and ears; these sensations were almost constant but greatly aggravated by lying down. Child was weaned at the fifth month; recovery not complete till five months later. At next pregnancy she was confined of twins, tried to nurse them, and the symptoms described above returned immediately. This time she became purple all over. Recovered under former treatment in a month. After each subsequent accouchement the symptoms returned in the third month after confinement, though no effort was made to remove the children; but she had no trouble after the two miscarriages. She was last confined in December, 1882, twins—and the symptoms of her old trouble began three months later. In the face there are many hard nodules, especially in the track of Steno's duct; some of them have disappeared and fresh ones developed. There are many small ones on the inner surfaces of the cheeks and lips. They are not tender nor painful. The face is slightly puffed and darker in color than natural. The knees are swollen, the right especially, presenting the appearance on the outside when flexed of an accumulation of synovia. She is un-

able to kneel. The elbows were slightly swollen and frequently gave a cracking noise when flexed. The nodules are doubtless due to enlargement of the lymphatic structures, owing perhaps to engorgement and apparently caused in some way by lactation. The case was submitted to elicit the opinion of the Society as to the nature of the affection and the course of treatment most advisable to be pursued.

Dr. Cameron considered the enlargements due to dilatation and occlusion of the lymph channels—really a lymphatic thrombosis—instead of the venous thrombosis so often seen after confinement. Dr. Workman suggested electricity as treatment.

Dr. Ferguson read a paper on Puerperal Pyrexia. This may be, 1. Neurosal, the elevation of temperature here being dependent upon altered relationship of nerve governance. 2. Cases due to such causes as constipation, urinary derangement, etc. 3. A deranged relationship between the effete matters entering the circulating fluids and those rejected. 4. Malarial fever in the newly confined. 5. The septic diseases proper, viz.: (a) Sapræmia, or the entrance into the system of dead poison; this always has a local origin, and (b) Septicæmia, from local or constitutional infection. In this condition the free use of quinine is indicated. As illustrating the value of this drug he mentioned some experiments on dogs. To No. 1 he gave five grains every six hours. After three doses the contents of a hypodermic syringe of offensive lochial discharge was injected. No. 2 received a similar injection, but five grains of quinine had been added to it. No. 3 received the injection without quinine at any time. Nos. 1 and 2 recovered, No. 3 died in forty-one hours. To be effectual in cases of puerperal septicæmia, this drug (quinine) must be given to the amount of $\frac{1}{1000}$ of the weight of the patient, twenty grains would be the minimum dose. Discussion on the paper was postponed till next meeting.

Regular meeting May 31st, the president in the chair. Dr. F. Krauss and Dr. M. Wallace were elected members.

Dr. Riddell brought forward two patients, the first showing an admirable example of Eczema Pustulosum; the second with a deep seated tumor of the neck, considered by Dr. Aikins and Dr.

Fulton to be cancerous. Operation was not advised. A discussion then took place on Puerperal Pyrexia, the paper read at the previous meeting.

Dr. Oldright considered that the type of this affection lately had been metritic.

Dr. Cameron regretted that the essayist had given no rules for differentiation; because if slight causes, as mental emotion, may send the temperature up 3° or 4° , it is of importance to be able to distinguish such cases. According to his observation, peritonitis seems more common than metritis.

Dr. Ryerson referred to the case of the Duchess of Connaught to emphasize the importance of good sanitary arrangements in accouchements.

Dr. McPhedran considered that general puerperal septicæmia may be complicated by a local diseased condition. A case in point was given. Sepsis may be effectually guarded against by proper precautions.

Dr. Machell showed a placenta and fœtus. Mrs. W. menstruated last time 9th November last. In December and January more or less morning sickness and pricking pains with a feeling of fullness in the breasts. Slight enlargement of abdomen towards end of January. During the latter part of February breasts became softer, and later, flabby; pricking pains ceased and abdomen seemed to get smaller, at the same time feeling cold and uncomfortable. These latter feelings have continued since last named date. Knowing that she had a fleshy mole two years ago, she was under the impression that this might be something similar. A vaginal examination revealed the fact that the uterus was enlarged to about the same size as in pregnancy between third and fourth month. Gave a placebo and asked her to report in a month. An offensive discharge brought her back in three weeks, when he introduced a bougie into the uterus and left it there. Within twelve hours labor came on and a few hours later brought away a dead fœtus with membranes intact and placenta attached. Fœtus was probably between the third and fourth month, of a greyish leaden color. Sac contained a dark colored grumous fluid—nothing abnormal in the appearance of placenta. No cause for the death of fœtus could be ascertained.

Dr. Davidson read the report of the meeting of Council, which was adopted.

Regular meeting June 14th, the president in the chair.

Dr. Cameron showed a boy, æt. 18, with the following history. At 5 years he took scarlet fever, was much reduced, but no otorrhœa or anasarca. At 6 years had St. Vitus' dance, which lasted seven months. At this time he complained of his nose. At 12 years he went to work on a farm, and kept well till three years ago, when he had zona for three weeks—after this whenever he got wet a rash came out on the lips and they would swell. About a year later the throat and nose became sore. Difficulty in swallowing and scabbing in nose, followed by discharge and offensive breath. Kept getting worse until a year ago in April when he went to the Hospital, where he remained a month and improved under carbolic spray and internal medication. Has been subject to otorrhœa from left ear and when in Hospital got erysipelas. Besides the otorrhœa, he presents the somewhat rare condition of adhesion of the soft palate to the pharynx, with perforation. Dr. Cameron considers it a case of congenital syphilis, the adhesions being due to the breaking down of gummata.

Dr. Palmer, referring to the presence of tinnitus remarked on the cause, viz., rarefaction of the air in the naso-pharyngeal space. He prophesied complete deafness, unless a communication were established between the mouth and naso-pharynx.

Dr. Reeve remarked that an opening through the membrana tympani might accomplish the desired end.

Dr. Cameron thought that the perforations in the soft palate allowed sufficient communication—operations for that purpose had usually been unsuccessful. He suspected necrosis of the bones in the nasal cavities; if so, their removal would doubtless improve matters.

Dr. Macdonald presented a heart containing only two cavities, viz., an auricle and a ventricle. History. K., æt. 12, tall for her age, an inmate of the Orphans' Home. Has always been cyanotic. Heart's action labored, with a pre-systolic murmur at the base, best heard to the left of the sternum, at the second intercostal space. Breathing regular. Has had no pain. Death caused by tuberculosis. The condition of the heart was only discovered post mortem. During life the foramen tale was supposed to be potent.

Dr. McPhedran considered the murmur to have been caused by the meeting of the venous and arterial streams in the single cavity.

Dr. Cameron referred to the theory of the formation of the normal heart from a single blood-vessel; he asked Dr. Sheard's views.

Dr. Sheard explained and illustrated Kolliker's idea. The tube is bent upon itself, the septum being formed by coalescence of the walls of the vessel. This septum grows downwards, ultimately completing the separation between the ventricles.

Dr. Ryerson showed a temporal bone which was carious to a large extent on the superior surface of the petrous portion. It was removed from a man æt. 32, having the following history. On the morning of May 24th he was seen by Dr. Sweetman; had great pain in head; dizziness, seemed rather silly. Temperature 101°; anorexia, constipation. History of chronic discharge from right ear. Symptoms varied in severity for a couple of days when he was advised to go to the Hospital. When seen by Dr. Ryerson on the 26th he had great pain in the head. Vomiting of most offensive material; quick, weak pulse, delirium, and loss of appetite. There was a brownish and very offensive discharge from the right ear. He was almost absolutely deaf. Ophthalmologic examination was negated by the restlessness of patient. There was no swelling or venous enlargement over mastoid process or zygoma. He made a free incision, about 1½ inches in length, down to the bone over the mastoid with a view to local depletion. Bled freely for an hour, after which patient seemed a good deal better; pain much less. Symptoms, however, recurred. He became gradually comatose and died June 7th. Post-mortem next day revealed a large quantity of serous fluid beneath dura mater; pus along base of brain and a collection of pus in the substance of hemisphere, separated some distance from carious bone by comparatively healthy brain substance. Dr. Ryerson, in remarking on the case, pointed out the importance of attending to discharges from the ear. In the vast majority of cases the pus comes from the middle ear. Out of seventy-six cases of abscess of the brain, recorded by Gull and Sutton, twenty-five, or nearly one-third, were caused by ear disease. Field, of London, states that of five hundred cases of perforation of the membrana tympani from all causes, one per cent. died of abscess of the

brain. The question might arise in such a case as the above, would perforation of the mastoid have been advisable? Probably not. An instance was mentioned in which the symptoms were held to justify the operation. The relief, although great, was only temporary.

Dr. Reeve pointed out that suppurative otitis may, in many instances, be prevented by free and early local depletion, irrigation with a solution of atropine, and the use of Turkish and other baths.

Dr. Sheard showed a peculiar cyst—which was in connection with both ovaries, these being in a state of suppuration. Was it ovarian or parovarian? He inclined to the opinion that it was ovarian.

The President presented a specimen of Pleuritis and Endocarditis. On cutting into the left pleural sac, at the autopsy, what seemed almost to be a third pleural covering was seen. It was placed between the visceral and costal layers—being very slightly adherent to the latter.

RIDEAU AND BATHURST DISTRICT.

The 10th annual meeting of the above named medical association was held at Arnprior, on Wednesday, the 27th of June. A most important feature of this meeting, which is held soon after the Medical Council has had its annual session, is the address and report of the president, who is the representative for the district. The members are thus brought into intimate relation with the Council, and the course of the president made easy by knowing the views of those he represents. At the close of the address the election of officers was proceeded with, resulting as follows:—

President, Dr. Cranston, Arnprior; Vice-Presidents, Drs. Malloch, Ottawa, and Groves, Carp; Treasurer, Dr. Hill, Ottawa; Secretary, Dr. Small, Ottawa; Council, Drs. Dickson, Pembroke; Armstrong, Arnprior; Rattray, Cobden; Burns, Almonte; Baird, Pakenham; Bell, Bearbrook; Grant, Sweetland and H. P. Wright, Ottawa.

Papers were read by Drs. McFarlane, Almonte, and Groves, Carp. The former gentleman presented a very exhaustive paper on the "Management of the Bowels in Typhoid Fever." He referred to the many conditions that may be present, but the principal point was to deprecate any effort to render the bowels costive and to favor the maintenance of free evacuation throughout the course of the disease. In the discussion

which followed, the general tenor of the remarks coincided with the reader's views. Dr. Groves' paper was upon some "Cases of Lead Poisoning" occurring in his practice, the source of the poison being a jar of vinegar, the fluid acting on the lining, which contained free litharge. Dr. Burns reported a case of gun-shot injury to the abdomen. A long discussion upon abdominal injuries in general followed.

The secretary distributed pamphlets and circulars issued by the Board of Health, requesting that the blanks should be filled and forwarded to Toronto. The next meeting will be at Ottawa in January, 1884.

Selected Articles.

HEMORRHAGE FROM THE RECTUM.

The causes and treatment of hemorrhage from the rectum, of a character requiring surgical treatment, are thus concisely summarized in a paper by Dr. J. M. Matthews, of Louisville, read by him before the Kentucky Medical Society (Louisville *Med. Herald*.)

Causes: The causes of hemorrhage from the rectum may be briefly named as follows:

1. Hemorrhage following the ligation of internal piles.
2. From ulceration of the bowel.
3. From capillary hemorrhoids.
4. From hemorrhagic diathesis.
5. From polypi.

These in my opinion constitute the only causes of hemorrhage requiring surgical interference. The existence of piles in all classes is recognized. The operation for their relief is often attended with much bleeding. True, that surgeons do the operation thousands of times without such an occurrence, yet so able a surgeon as Sir Astley Cooper lost a patient from hemorrhage after the ligating of a pile. There are three causes for hemorrhage following this operation, viz:—1. The division of a vessel or vessels at the time of operating. 2. Puncture of a vessel in transfixing tumor. 3. In sloughing of the pile.

The hemorrhage that takes place after ligating the tumors may be accidental, recurrent, or secondary. Primary hemorrhage is rare. It has been my experience that it is seldom necessary to apply a ligature for its arrest. Indeed I have never had occasion to do so in my practice. If a general oozing takes place, say after the recovery from shock, it can usually be arrested either by pressure or the application of *hot* water. If *cold* is used the reaction will sometimes prove dangerous. I am sure that hot water acts as a stimulant to both the

walls of the vessels and to the nerve fibrils in the wound. One advantage in its use is that it does not produce shock. That it is a valuable *hemostatic* can not be doubted. The styptic solutions of iron can not be used in these cases because they destroy the ligatures that have been applied to the piles.

Puncture of a vessel in transfixion. In the method advocated by Dr. Van Buren of New York, of transfixing these tumors, much bleeding may occur from the piercing of a blood-vessel by the needle. The only remedy in such event would be to draw down the pile and place a ligature *above* the point of bleeding.

Hemorrhage from sloughing of the tumors.—This is seldom met with if the operation is by the ligature. It has been the misfortune of the writer to see several severe cases of the kind following the operation of injecting piles with carbolic acid. In hemorrhages from sloughing, it is out of the question to attempt to apply the ligature. Recourse must be immediately had to plugging the rectum. This is best done by taking a bell-shaped sponge and threading it through the apex with a stout string, wet it in water and powder with the *persulp. iron*; push it gradually and steadily up the rectum, and pull upon the string, this expands the sponge and causes equal pressure. In lieu of this arrangement, cotton wool can be treated in like manner and placed in position through a speculum.

Hemorrhage from ulceration of the bowel.—I use the term *ulceration* here, believing that it is an *ill* term and should not be used in this connection, yet the authors have failed to give us a better one. True ulceration is not and can not be accompanied with much bleeding, for the reason that there is sufficient inflammatory action incident to the disease to clog the vessels, hence to *prevent* hemorrhage.

The condition to which I desire to direct your attention, in contradistinction to ulceration, is an *abrasion* sometimes found in the epithelium of the gut. This may arise from trivial causes, as the passage of hard fecal matter, etc. The result may cause serious alarm. There is no inflammation attending this "peeling" off. In its incipency, the blood pours freely from the capillary structures unless active measures are taken to suppress it. The discharge may be pure blood, or blood mixed with the mucus of the bowel. Very many of these cases have, I am sure, been mistaken for other affections, notably, dysentery.

Treatment.—The object of treatment in cases of this nature is of course to produce sufficient *inflammatory* action to clog the vessels with lymph. The very best application to accomplish this is in my opinion *pure carbolic acid*. It should be applied not only to the abrasion proper, but to the mucous membrane surrounding it. It stops hemorrhage

and does not destroy the membrane. Nitric acid, or the acid nitrate of mercury, would likely accomplish the same purpose, but at the risk of producing stricture. It would be inconvenient to apply the actual cautery. Very little account of the affection of which I am speaking is given in the works on surgery, or in the books devoted to diseases of the rectum; unique they may not be, but certainly demand more attention than they receive.

Hemorrhage from capillary piles.—It will be remembered that these are the small, spongy, raspberry-looking pile which is often met with. Its disposition is to bleed upon the slightest provocation. The blood lost is usually pure arterial. A hard stool, or straining at stool, is common cause of a rupture, and the amount of blood sometimes lost is enormous and may end fatally.

Treatment.—In my opinion it is best, in order to arrest the bleeding, to catch up the entire spongy mass and secure it by a silk ligature. The ordinary tenaculum forceps used in ligating piles are objectionable in these cases. They tear through the mass and cause fresh bleeding, besides they do not enable you to secure the mass with ease. I have devised a forceps which is made by Adolph Fischer of this city, which answers the purpose better. It has a *serrated* edge, instead of *forks*, and placed on the handle at an angle of about forty-five degrees. In many cases I have stopped the bleeding by the application of pure nitric or carbolic acid. The actual cautery here is a most excellent remedy. The thermo-cautery is the form in which it should be used.

Hemorrhage from a hemorrhagic diathesis.—This as a cause for hemorrhage from the rectum is scarcely mentioned by the authors. That it occurs, has been evidenced in my practice, and when met with is of the most serious nature. Local measures seem to do but little good, and it is to be questioned if such patients are ever relieved. The diathesis is manifested in the rectum, as it would be in any other, or all portions of the body. The slightest scratch, or abrasion, or handling the part is sufficient cause for the hemorrhage, which is often uncontrollable.

Treatment.—This diathesis may be hereditary or it may be established by habit. Sedentary life conduces much to its production. The habits should be diligently inquired into, and a change, if necessary, positively enjoined. Exercise, fresh air, proper diet, etc., should be carefully looked after. The sheet-anchor, in the treatment, I believe to be *ergot* or *ergotin*. This should be combined with iron and given for its full effect. The best local applications are, hot water (injected), *subsulph. iron*, and *pure carbolic acid*. Each repeated as often as the case requires. The last cause which I have named for hemorrhage from the rectum calling for surgical interference are polypi. These

tumors may lie above the sphincter muscles for a long time, giving no special inconvenience, but all at once they may begin to bleed, either from detachment or other causes. They are very vascular and fed by a good-sized vessel. They should be brought into view and the pedicle ligated. This is best done under an anæsthetic, and by dilating the sphincter forcibly. If hemorrhage should occur from the sloughing of the tumor, or from its being torn off, the pedicle, or stump, must be sought, and if it is not possible to include it in a ligature, the rectum should be plugged in the manner herein described.

Hemorrhage from all the sources mentioned here has frequently been met with in my practice. If a proper diagnosis is made before serious damage is done by the loss of blood, the remedy is easily applied. A thorough investigation of each and every case is necessary to determine the remedy, and if the attention of the profession is so directed, I feel that the object of this paper has not been fruitless. I have met with one case of vicarious menstruation through the rectum, but such cases are very rare and require no treatment.

EXCISION OF THE KNEE.

Resection of the knee has long been an accepted surgical procedure in this country and in Germany, and the names of Fergusson and Langenbeck will always be associated with its early history. In France, however, it has been strenuously opposed, and in M. Ollier it has found a severe critic, who early drew attention to the serious shortening of the limb resulting from the operation when performed in young children, and to its high mortality among adults. He has stated that while the mortality after amputation of the thigh in cases of chronic suppurative osteo-arthritis was 40 per cent., the death-rate from excision of the knee in quite similar cases rose as high as 80 per cent. In an article in the last two numbers of the *Revue de Chirurgie* he makes a full recantation of these views, and, while speaking in a highly appreciative manner of the operation, offers some suggestions as to the methods of its performance which are well worthy of attention, particularly as coming from a surgeon of perhaps unequalled experience in this class of surgery.

M. Ollier has not altered his opinion of the value of excision of the knee in young children. His own investigations, corroborated by Prof. Humphrey and borne out by not a few lamentable cases, have conclusively shown that if the whole of the lower epiphysis of the femur be removed, as is often necessary, the growth of the limb is interfered with to a disastrous extent; and if the surgeon be able to preserve a part of the epiphysis, yet the disturbance occasioned by the operation to

the nutrition of the actively growing portion that is left behind is so great that even then the limb is seriously shortened. On this account M. Ollier rejects altogether the operation of excision of the knee for patients under eight years of age. He further adds, in reference to this, that these patients are excellent subjects for incisions into joints, scraping, and free drainage; and that, if these measures fail, amputation is the sole resource. In this view we believe he is in accord with British surgeons.

The change that has taken place in M. Ollier's estimate of the value of excision of the knee has resulted from the success attending in his hands the use of a strict antiseptic plan of treatment. In place of a mortality of 80 per cent., he is able to record a series of seven successive resections of the knee, with only one death, which took place a few hours after the operation (from carbolic intoxication he believes)—a mortality of 14 per cent. During the last session he had twenty-two resections of large joints and amputations of the thigh or leg, without a single instance of infective mischief; while ten years ago, he states, he would have lost from 40 to 50 per cent. of such cases from erysipelas or pyæmia. Well may he exclaim that antiseptic dressings have so altered the conditions attending operations that it is necessary to review with care opinions founded upon data obtained under the old system.

The method of operating that M. Ollier advocates is the subperiosteal, but he would vary its details according to whether it is performed for injury or disease. For injury he recommends a single vertical median incision over the front of the joint, extending quite into the joint above the patella, and also below where the ligamentum patellæ is to be split. He then saws through the patella vertically, but before completing the excision of the articulated surfaces through the opening thus made, he makes an incision for drainage on each side into the joint, one just in front of the biceps tendon, the other in front or behind the sartorius, and subsequently he places a drain in each of them. He then divides the crucial ligaments, bends the joint fully, protrudes the femur and peels off from it the periosteum and ligamentous and tendinous attachments, and saws off the end. He treats the tibia in the same way. The sections of the patella are then wired together, and the wound closed with a drain at its upper and lower end. When operating for disease he recommends that a freer opening be made into the joint, as more room is required for the following up of all the recesses of the synovial cavity and for the treatment of the patella itself. He therefore employs an **H** incision, making a straight cut into the joint below the patella, extending laterally not quite as far as the lateral ligament, and not being quite so long as the transverse diameter of the

condyles. From each extremity of this he makes a vertical cut upwards and downwards, of a length varying with the extent of the disease and the amount of bone requiring removal. In this way two small flaps are marked out, of which the lower is always the smaller. Two incisions for drainage are made at the sides of the joint, as in the other operation, care being taken to have the inner one behind the sartorius tendon, and both of them made without injury to tendons. The upper flap is then raised, the joint well explored, and the patella, if necessary, removed by shelling it out from its anterior periosteal investment. The periosteum and ligamentous and capsuled attachments are then carefully peeled off from those parts of the femur and tibia which are to be removed, and those bones are sawn across. The synovial membrane is excised or scraped, as the case may be, and an opening for drainage made at the top of the suprapatellar pouch; then the bones are united by two wire sutures, and the cutaneous incision united, special care being taken to stitch together the cut ends of the ligamentum patellæ.

M. Ollier first points out that the aim of the surgeon is to obtain bony union after excision of the knee. To preserve the periosteum where possible directly aids in the ossific union of the two bones, while to leave the lateral ligaments as well as the posterior intact, is an important aid in maintaining the bony parts in exact and firm apposition. He lays considerable stress upon the importance of suturing carefully the divided ends of the ligamentum patellæ, so as to enable the quadriceps extensor muscle to counteract the tendency of the flexors to displace the tibia backwards. In cases of compound comminuted fracture into the knee-joint, M. Ollier is in favor of excision, even where a great length of bone has to be removed, and he suggests that in such cases it would be well to remove a part of the soft tissues in front of the joint; if not, when the ends of the bones are approximated the soft parts are greatly relaxed and bulge considerably around the bone, and as the flexors shorten more quickly than the extensor muscle, there is great danger of displacement of the tibia backwards, which can be prevented by artificially shortening the extensor tendon.

M. Ollier hopes that hereafter excision may be successfully performed in military surgery. In connexion with this, it is interesting to note that in the volume of the "Surgical History of the American War," just issued, it is recorded that excision of the knee-joint was performed for shot fracture in fifty-seven cases, with a total of forty-four deaths, ten recoveries, and three cases in which the issue has not been determined. In thirty-two cases the operation was primary; four patients recovered, but in one of them secondary amputation of the thigh was performed. Only one out of thirteen cases of intermediary excision proved successful; but of

seven secondary operations, as many as four, or 57 per cent., were successful. This was before the days of antiseptic surgery, at a period when M. Ollier was having a mortality of 80 per cent. in excisions for disease.—*The Lancet*.

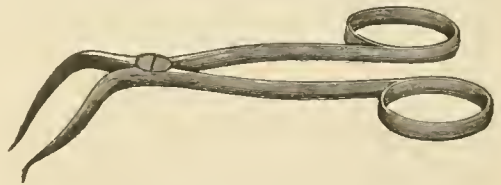
TRACHEOTOMY.—A NEW DILATOR.

BY W. J. OTIS, M.D., BOSTON.

The operation of tracheotomy is by no means a simple operation, and its performance is probably more dreaded by surgeons than that of any other. Numerous instruments have from time to time been invented for the purpose of making its performance more easy; but of these very few are in general use, nor can it be said that any of them are indispensable, as any competent surgeon could if called upon suddenly perform the operation with the instruments found in the ordinary pocket-case, improvising a tube by bending up a probe or a piece of wire, or dispensing with the tube entirely and stitching the cut edges of skin and trachea together. If, however, the surgeon has sufficient time to select his instruments according to the peculiarities of the case, it is then that some of the special instruments will be found of great assistance.

Of the numerous instruments that have been invented for this operation the greater part of them are either tracheotomes or dilators. There can be no doubt of the superiority of the knife over any tracheotome, and in the hands of the incompetent the latter may prove a dangerous instrument. As for the dilators, they are not easy to insert, are liable to slip out, and take up so much room in the tracheal wound that it is difficult to insert the tube.

The accompanying cut represents an instrument



devised by the writer, the peculiar feature of which is a tenaculum and dilator combined. The action is the same as in the Richardson dilator, the blades being bent at an angle instead of being parallel, so as to act as retractors of the soft parts, and each blade terminating in a hook. The point of each hook being turned down aids in introducing. By pressing the points lightly against the trachea and opening the blades the hooks insert themselves firmly into the trachea, leaving space enough between them for the knife to pass. The instrument is now a tenaculum, by which the trachea can be

lifted forward and held firmly before opening it, which is particularly to be desired when operating on children, where the trachea is situated deeply and often has a great range of up-and-down movement. To open the trachea the knife is inserted between the blades, and as the rings of the trachea are cut the instrument can now be used as a dilator, holding open the edges of the cut perfectly with no danger of slipping out.

The interior of the trachea can now be inspected, false membrane or any foreign substances removed, and hemorrhage stopped previous to inserting the tube. As the blades of the dilator take up no room the tracheal opening need be made no larger than is absolutely necessary to admit the tube. The tube can be readily inserted, and the dilator quickly dislodged by merely closing the blades.

The advantages claimed for this instrument are :—1. A tenaculum for elevating the trachea and controlling its movements. 2. A dilator, the operator never losing his hold on the first opening made into the trachea. 3. The blades of the dilator being hooks take up no space, and allow easy introduction of the tube through the smallest possible opening.

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SUCCESSFUL CASE OF REMOVAL OF LARGE SPLEEN.—A successful case of removal of the spleen in leukemia, by Fernando Franzolini, of Turin, is recorded in the *Wiener Medicinischen Wochenschrift*, No. 20. The patient was a pale, delicate woman, twenty-two years of age, who worked in a match factory at Paderno. From childhood she had been sickly, and since the age of seventeen menstruation had been irregular, and at times she had suffered from hysterical symptoms. She had never lived in a malarial region, and had never suffered from intermittent fever. The white blood cells were five times more numerous than normal. There was no albumen in the urine. An incision was made along the linea alba to the left of the umbilicus, twenty-two centimeters (eight inches and a half) in length. The coils of intestine and the large omentum which presented were protected by warm-water compresses, and the spleen, with the help of the assistants, was pushed out of the wound. On account of the shortness of the pedicle in the floor of the peritoneal cavity, it was found necessary to place a double silk ligature on the splenic artery, which was the size of the forefinger, and on the vein, which was the size of the thumb. The gastro-splenic ligament, included in two ligatures, and the diaphragmatic, in one ligature, were divided. The patient lost scarcely a spoonful of blood. The operation lasted eighty minutes. The spleen measured, in length, ten and one fourth inches; in breadth, six and one half inches; in thickness, two and three fourth inches; and weighed, after

removal of nine ounces of blood, fifty-two ounces. The wound healed, and the patient is perfectly well with the exception of severe uterine pain at the menstrual period. The white cells diminished gradually, and in January, 1882, four months after the operation, showed almost a normal condition.—*Louisville Med. News*.

CHLOROFORM BREATH IN GASTRIC DISTURBANCE.—The French correspondent of the *Medical Press* (April 18, 1883,) says :—There is a symptom of gastric disturbance in children which I have never yet seen mentioned in any text-book, French or English, and yet it is almost invariably constant and generally to be met with at the *début* of the affection, so that it may be considered as a sure premonitory sign. I mean that of the breath, which smells as if the child had freely inhaled chloroform. I have always found that this "chloroform breath" not only commenced with the gastric disturbance, but continued during the whole period of the malady, and that its cessation indicated also a cessation in all the other general symptoms, fever, vomiting, etc., and consequently a return to health. I have remarked this peculiar odor in children of every age, and once in a grown-up person; it was then very strongly marked. I do not pretend bringing to light anything new, but I have never heard this peculiar symptom alluded to anywhere. In gastric derangement or *embarras gastrique*, as the French call it, the breath has always been described as possessing a heavy odor, but that is very different from the chloroform smell which is sometimes so pronounced as to be liable to induce the medical man to believe that the patient had been using the anæsthetic.

Another correspondent writes to the same journal (April 15, 1883) as follows: As a corollary to your French correspondent's remarks in last week's *Medical Press*, I may mention that this phenomenon is not confined to gastric disturbance. It is at times common immediately after sexual connection, and during the act a naturally foul breath may become quite sweet and of a distinct chloroform odor. The explanation is to me a mystery, but I am *positive* as to the fact.—*Med. & Surg. Rep.*

TREATMENT OF FRACTURES OF THE LONG BONES.—Dr. James R. Taylor, of New York, read a paper on the above subject before the American Medical Association, June 6th, 1883, in which he briefly presented some methods of diagnosis and treatment from the extensive surgical *clientele* of the out-door department of Bellevue Hospital. He first spoke of fracture of the thigh bone, which he treats with a saddle made to fit into the perineum, whereby he secures the most perfect comfort possible by any apparatus used for the purpose of counter-extension. This neatly devised little sad-

dle is held in position by a strap, running to the headboard on each side, thus securing the patient in an immovable position. By fastening strips of adhesive plaster, previously secured to the leg, to a screw arrangement in the foot of the bed, he can produce any desired degree of extension of the limbs by simply turning the little screw at the foot of the bed; the chief advantage of the whole apparatus over all other instruments being the little saddle on which the patient sits, as it were, with comfort, he claims, rather than misery, as in most other methods. He announced himself as opposed to the old method of using stones and other suspensory weights to produce extension of the limbs, and then turned his attention to the treatment of fractured ribs. He brings the broken ends into place by raising the arms over the head, an original method by which he claims there is no trouble in adjustment. They are then held in place by a band of adhesive plaster around the body.—*Med. News.*

DIAGNOSIS OF PERI-NEPHRITIC ABSCESS.—In an excellent paper on Peri-nephritic Abscess (*Am. Jour. Med. Sci.*, April, 1883), Dr. J. B. Roberts gives the following tabular statement of symptoms to assist in the localization of the disease, and its diagnosis.

All anterior regions.—Pain, tenderness, swelling, œdema, and pointing in front and side of abdomen.

All posterior regions.—Pain, tenderness, swelling, œdema, and pointing in loin.

Upper tracts.—Pleuritic friction, pleural effusion, empyema, expectoration of pus; dyspnoea; supra-renal involvement; solar plexus involvement. (On right side.) Bilateral œdema of legs; jaundice; fatty stools; persistent vomiting; rapid emaciation; ascites.

Middle tracts.—Albuminuria and casts; supra-pubic, scrotal or vulvar pain or anæsthesia; suppression of urine; uræmia; pus in the urine; œdema of scrotum or varicocele (especially in left side).

Lower tracts.—Flexion of hip; pain or anæsthesia of front, inside, or outside of thigh; retraction of testicle; pain at knee; scrotal or vulvar pain or anæsthesia, without accompanying albuminuria; unilateral œdema of legs; abscess of sinus near Poupart's ligament; constipation (if left side); involvement of chyle receptacle (if right side.)

CHRONIC CYSTITIS.—Dr. Duncasse (*Gazette des Hopitaux*—N. O. Medical and Surgical Journal) regards corn silk as par excellence the remedy in chronic cystitis, allaying the inflammation and facilitating the expulsion of gravel. So marked also are its anæsthetic properties in such cases that the writer thinks it must possess some alkaloidal narcotic substance. This anæsthetic action is not marked in acute cystitis. He quotes with approval the conclusion of Landrieux regarding the stigmata maidis as

follows: 1. Not only are the different preparations of stigmata maidis useful as a modifier of the secretions of the urinary passages, but these same preparations can be equally considered as an incontestible diuretic agent. 2. Diuresis is rapidly produced, and in three or four days the augmentation of the amount of urine becomes evident and considerable. 3. The diuretic effects are observed, not only in the organs of urinary secretion, but also in disturbances of the circulatory system (diseases of the heart and blood vessels). 4. The pulse is regulated, the arterial tension is increased, while the venous tension is diminished. 5. The medicament does not cause the least disturbance, either of the nervous system or the digestive functions. 6. Tolerance for this drug is complete and absolute, and medication in chronic diseases can be continued without inconvenience for a month or six weeks, according to my observations.

THE BREAD-PILL CURE OF HYSTERIA.—M. M. Landouzy and Ballet, in the *Revue Mensuelle de Médecine*, give the history of an hysterical patient to which it is well to give an extended publicity, not because it presents any novel feature but as a proof of the scientific errors of those ill-trained minds which attribute the cure of hysteria to supernatural influences. An hysterical patient twenty-six years of age, who had previously suffered from chorea, was received in the wards of the Charité. There was very marked contraction of the lower limbs, and the patient was unable to execute the slightest movement, not being even able to raise herself in bed. After one or two hypodermic injections of morphia, at her express desire, she was told that she should have a more energetic remedy, and must use it cautiously. On October 7th, bread-pills were prescribed, and the next morning she related that, wishing to poison herself, she had swallowed the pills, and eagerly asked to have another pill; this was accorded, and resulted in her complete recovery. Two days later on she helped to clean the wards. In a month's time she left the hospital.—*Brit. Med. Jour.*

FEMORAL HERNIA.—**RUPTURE OF COVERINGS.**—Dr. Bernard Pitts records in the *Lancet*, April 7, 1883, the case of a woman aged 46, who had a right femoral hernia for twenty years. She had been once operated upon. One evening upon sneezing, the skin over the tumor, near to, but not in the line of the cicatrix, gave way, and a foot of intestine escaped. She was brought to the hospital three hours later on a cold frosty night. The exposed intestine was congested, dirty, bruised and cold. Taxis failing, the wound in the skin was enlarged, the crural ring was nicked, and by manipulation the bowel was returned. The thickened sac was dissected out and removed, drainage for peritoneal cavity provided, and the edge of the sac

brought together by very strong catgut, the edges of the wound by silk sutures, and carbolic gauze used as a dressing. The patient did well.—*Med. and Surg. Rep.*

PURPURA AND SUPPRESSION OF MENSES.—Dr. Lindsay stated at a recent meeting of the Ulster Medical Society, that several cases of purpura had come under his notice in women who were suffering from suppression of menstruation. He was not prepared to say that these cases were examples of vicarious menstruation; but in the absence of any well-established pathology of purpura, he thought he was warranted in concluding that the disease had its immediately exciting cause in altered innervation consequent upon the non-performance of the menstrual function. In the case under discussion, the administration of iron produced melæna, and had to be discontinued. The mineral acids were then given, and in two weeks the eruption had disappeared; and with the exception of slight languor and fatigue, the patient was again in her usual health.—*Lancet.*

NEW TREATMENT OF SARCOMA.—Prof. Winiwarter, of Liege, has been employing parenchymatous injections of hyperosmic acid in cases of sarcoma and lymphoma with astonishing success (*Revue Medicale*). A man applied at his clinic with a sarcoma of the neck as large as a child's head, deemed inoperable. For a fortnight he made daily an injection into its substance of three drops of a one per cent solution of the acid. The tumor rapidly softened, serous pus was discharged from the points where the injections had been made, the infiltration rapidly diminished, and at the end of a month the tumor had completely disappeared. There had been no sign of inflammation, and none of constitutional affection. Since this case he has resorted to it in others like it, as well as in cases of lymphoma and scrofulous adenoma. Only in genuine carcinoma has its result been disappointing.—*Weekly Med. Rev.*

ERGOT AS A PREVENTIVE OF THE POISONOUS EFFECTS OF SALICYLIC ACID.—Dr. Schilling recommends the administration of ergot in conjunction with salicylic acid or quinine, to obviate the unpleasant effects of those drugs. He had observed, in a number of cases in which large doses of salicylic acid were taken, a marked congestion of the external auditory canal and membrana tympani. He was thus led to give ergot to cause a contraction of the vessels, and obtained in every case a cessation or notable diminution of tinnitus and deafness. The dose of ergot (aqueous extract) should be about one-tenth that of the salicylic acid. The antipyretic effect of the latter is not weakened by the ergot. Like favorable results were obtained by combining ergot with quinine.—*Allgem. Med. Central-Zeitung.*—*Med. Rec.*

REMOVAL OF WARTS.—Warts may be removed by cauterization, as recommended by Dr. Cellier in the *Journal de Méd. et de Chir. Pratiques (Medical Record)*. An ordinary pin is thrust through the base of the wart, care being taken not to wound the healthy tissue beneath. Then the skin being protected, the head of the pin is heated in the flame of a candle. It is said that the wart becomes white and fissured in a few minutes, and comes away on the point of the pin. Dr. Cellier also says, that it is only necessary to remove one wart on the hand, that though there may be a dozen, all the others will disappear without treatment.

GLYCERINE IN SKIN DISEASES.—M. Desguin, of Antwerp, has given glycerine internally in certain forms of skin disease with, it is said, marked success, especially in acné punctata and the furuncular diathesis. He commences with four drachms daily and gradually increases the dose. He states that the secretion of the cutaneous glands, which is thick and irritating in these diseases, becomes more liquid, and cutaneous irritation is notably lessened. During convalescence from scarlet fever, he believes that it facilitates desquamation.—*Med. & Surg. Rep.*

CASTOR-OIL AND GLYCERINE.—A mixture which is of an agreeable flavor and in which the nauseous smell of the oil is efficiently disguised, can be made thus:

R.	Ol. ricini.....	3 j.
	Glycerini.....	5 j.
	Tr. aurantii.....	M xx.
	Tr. senegæ.....	M v.
	Aque cinnam.....	ad. 3 ss.

This forms a beautiful emulsion, is easily taken, even by children, and if administered at bedtime will produce a gentle motion the following morning. *N. Y. Med. Rec.*

SORE NIPPLES.—Dr. Favre (*St. Petersburg Medicinische Wochenschrift*) is of opinion that there are two varieties of these, fissures and erosions, and believes that the latter are to a large extent due to tight fitting dresses and pressure by corsets. He advises that the nipples be sprinkled with bismuth, dry, or that this be made into an ointment in the proportion of one of bismuth to two of vaseline. This procedure has often resulted in a cure within twenty-four hours.—*Gaillard's Medical Journal.*

CHLORATE OF POTASSIUM IN ULCERATING EPITHELIOMATA. In fine powder, this is said to yield excellent results when dusted over the surface of ulcers and ulcerating epitheliomata. The surface should be cleansed and the powder dusted thickly on twice a day. This, it is claimed, relieves pain and promotes healing.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO. AUGUST, 1883.

The LANCET has the largest circulation of any Medical Journal in Canada.

THERAPEUTICS OF BUTTERMILK.

Koumiss excepted, which is itself a kind of buttermilk, no beverage is so grateful and refreshing to thirsty patients as buttermilk. It is a fortunate circumstance too, that while the patient is assuaging his thirst with the most agreeable drink, he is unconsciously taking in the very best of food. Patients who loathe every other kind of food will greedily partake of buttermilk. It also possesses medicinal properties of considerable value. It is therefore not surprising that it is daily growing in favor with the profession. One thing, however, is surprising, and that is, the absence of any extended reference to it in medical literature.

From time immemorial buttermilk has been a staple article of diet. In Scotland and the North of Ireland it is delivered by dealers as regularly as new milk. As everybody knows, these people are the great porridge eaters of the world. By them, buttermilk is preferred with their cherished dish, and judged by results porridge and buttermilk are wholesome articles of diet, for where can be found sounder bodies or clearer heads, than are to be found amongst these celebrated porridge and buttermilk eaters. Buttermilk may be roughly described as milk which has lost most of its fat, and a small percentage of its casein and which has become sour by fermentation. To suppose that the principal elements of buttermilk are constant in quantity, and in their relation to each other, is a great mistake. To assist us in ascertaining more accurately the composition of buttermilk, we shall first of all examine the cream-crock. It contains

cream and milk in variable proportions. The milk has undergone fermentation and is acid, or sour, as it is commonly called. The relative proportions of cream and milk, contained in the cream-crock, depend on the fancy of the person who skims the milk-pans, in allowing much or little milk to pass over with the cream. There may therefore be much cream and little milk, or the reverse, a circumstance which has an important bearing on the contents of the churn, after the removal of the butter. Let it be borne in mind that under no condition is the whole of the fat removed. There is always a residuum of fat left in the churn. Should the cream be greatly in excess of the milk, this residuum of fat will be greater and *vice versa*. The casein contained in a given quantity of buttermilk, also varies in quantity. The thinner the layer of milk allowed to pass off with the cream, the poorer will be the resulting buttermilk in casein. The casein is still further reduced in the process of churning, a certain percentage being removed along with the butter. From this it is plain that buttermilk not only contains casein in variable quantity, but the casein is always slightly below the standard of average milk. Temperature is another disturbing factor in the proportionate relations of fat and casein contained in buttermilk, as compared with standard milk. If churning be performed at a temperature much too high the fat globules refuse to aggregate or coalesce so as to form butter. They behave in the same manner at a temperature much too low. As the real intermediate line is seldom exactly struck, it is easy to see that this furnishes an additional cause for a frequent excess of fat in buttermilk. If in connection with the foregoing facts we take the results of fermentation, or coagulation of milk, in which the sugar is converted into lactic acid, we shall have a tolerably clear idea of the ultimate constituents of buttermilk.

Coagulated skim milk differs but little from buttermilk in its chemical condition. It probably contains about the same quantity of fat. It is, of course, richer in casein, and herein lies the principal difference. In fact it is almost a perfect substitute for buttermilk, after being treated in the same manner as the contents of the cream-crock, that is, agitated, so as to break up, and thoroughly reduce the curds, and make the whole light and frothy by admixture with the atmosphere. Not long since a lady of our acquaintance hit upon the

above plan to satisfy the longings of an invalid for buttermilk, and it is to that circumstance that this article owes its origin. The season being winter buttermilk was unobtainable. The milk was coagulated by being put in a warm place. It was agitated by a revolving egg-beater until it was light and frothy. Sour milk thus treated tastes exactly like fresh buttermilk. In view of the fact that buttermilk is hard to get at certain seasons, the value of the proposed substitute becomes apparent.

The first process milk undergoes in the stomach is the coagulation of the casein. In sour milk this is already accomplished, and that too in a more satisfactory manner. Sweet cow's milk coagulates in the stomach in the form of semi-solid cakes, which many stomachs are unable to reduce to a proper state of subdivision. In sour milk on the contrary, the curds are loose and flakey, much resembling the curdling of human milk, which may be seen in the vomit of the over-fed infant at its mother's breast. The digestion of sour milk is made still more easy by the process of churning, by which the flakey curds are reduced to a state of fine subdivision.

Long experience has demonstrated the superior digestibility of buttermilk, and this inquiry simply furnishes the reasons. Buttermilk is a true milk peptonoid, that is the fashionable word of the day,—milk already partly digested. The range of its application is therefore wide and but little restriction need be observed in its use. It is good food and drink for young and old, sick and well. Being food it ought not, as many do, be taken between meals. This practice accounts largely for the common belief that buttermilk disagrees with many persons. Being an agreeable drink, it is often too freely used. Sick persons who partake of little or nothing else, may partake much oftener, and more freely. Although containing about the same quantity of nutrition as sweet milk, yet patients appear to be able to consume with ease at least double the quantity of buttermilk.

Buttermilk has at least three therapeutic properties more or less marked. It is a decided laxative to the bowels, and this fact should be borne in mind in the treatment of typhoid. This affords a hint for its use in habitual constipation. Buttermilk is a diuretic and may be prescribed with advantage in some kidney troubles. Owing to its

acidity, combined with its laxative properties, it is believed to exercise a gentle impression on the liver. It is well adapted to many of the cases where it is customary to recommend lime-water and milk. It is invaluable in the treatment of diabetes, either exclusively or alternating with skim milk. In some cases of gastric ulcer and cancer of the stomach it is the only food that can be retained.

QUEBEC MEDICAL ELECTION.

The triennial meeting of the College of Physicians and Surgeons, Que., was held in Quebec on the 11th ult., under the Presidency of Dr. R. P. Howard of Montreal; Drs. A. G. Belleau and F. W. Campbell, acting as secretaries. Among those present were Drs. R. P. Howard, L. Larue, A. G. Belleau, C. Verge, Z. Gravel, A. Larochelle, J. Th  berge, G. B. Lafleur, W. Lamontagne, F. W. Campbell, J. L. Leprohon, H. Sauv  , W. Osler, G. Ross, T. A. Rodger, J. A. Ross, E. P. Lachapelle, D. B. Desaulniers, T. Fortier, G. Lachance, R. Latraverse, C. E. Lemieux, sr., J. A. Sewell, G. O. Beaudry, J. Lanctot, N. H. Ladouceur, A. Robitaille, A. Marois, J. Langlois, V. P. Lavall  e, E. P. Chevrefils, M. Guay, G. H. Dufresne, W. Marsden, J. P. Lavoie, A. Gavreau, L. Catellier, G. Bolduc, E. Gervais, C. Gingras, A. Dion, N. Lacerte, J. E. Ladriere, J. B. Bolduc, E. A. De St. George, C. S. Parke, S. Gauthier, J. B. Gibson, J. A. S. Brunelle, D. A. Hart, F. E. Roy, J. Marmette, A. Morissette, M. A. Falardeau, S. Bolduc, E. Duquet, E. Belleau, E. Badeau, J. B. Lamarche, J. M. Turcot, G. Turcot, E. Turcot, R. F. Rinfret, A. Jackson, F. R. Rinfret, F. D. Gilbert, P. Wells, A. Watters, W. Verge, G. Mazurette, J. Marceau, P. A. Shea, M. J. Ahern, F. J. Austin, H. Russell, V. St. Germain, L. Beauchesne, M. Fiset, A. Hamel, E. Morin, A. Vall  e, C. Cot  , A. Poliquin, F. Gendron, N. Lavoie.

The minutes of the last triennial meeting were read and approved. The treasurer, Dr. Lachapelle, presented his report which was adopted. M. Lamirande, the public prosecutor, also presented his report from which it appears that 44 actions were entered against persons practising medicine without license. Thirty-five of these were decided in favor of the College, nine were unfavorable, and five are *sub judice*. An animated discussion followed

upon some much-needed amendments to the act regarding the manner of electing governors. It was finally decided to submit the various propositions to the new board of Governors for their consideration, to report at the next triennial meeting. The election of Governors by ballot was then proceeded with, resulting as follows :

City and District of Quebec—L. Larue, A. G. Belleau, W. Marsden, C. S. Parke, E. A. De St. George, and H. Russell;—Lieut. Governor Robitaille, C. Rinfret, C. Gingras, M. Guay, P. E. Grandbois, J. Marmette, and L. T. Rousseau. *City and District of Montreal*,—T. A. Rodger and J. B. Leprohon;—J. Prevost, P. E. Migneault, D. A. Hart, N. H. Ladouceur, J. A. Duchesneau, J. Lanctot, L. D. Lafontaine, H. A. Migneault, and D. Marcil. *District of St. François*,—T. Larue, F. X. Paré and A. J. Austin. *District of Three Rivers*,—D. B. Desaulniers, Hon. J. J. Ross, and F. A. Dame.

University Representatives,—Laval, C. E. Lemieux, and J. A. Sewell, (Quebec), E. P. Lachapelle and A. Lamarche (Montreal); McGill, R. P. Howard, and Geo. Ross; Victoria, E. H. Trudel, and W. H. Hingston; Bishop's, F. W. Campbell and R. A. Kennedy.

At a subsequent meeting of the new board of governors the following officers were elected:—C. E. Lemieux, President; Hon. J. J. Ross, and W. H. Hingston, Vice-Presidents; A. G. Belleau, and F. W. Campbell, Secretaries; L. Larue, Registrar, E. P. Lachapelle, Treasurer; Profs. Miller, Howe, Verreault and Laflamme, Matriculation Examiners; Drs. Church and P. E. Mignault, Assessors for McGill College; A. C. McDonell and Ladouceur for Victoria, Marsden and F. E. Roy for Laval (Quebec), J. Reddy and O. Raymond for Laval (Montreal), and T. A. Rodger and J. B. Leprohon for Bishops. Examiners for Midwives, Drs. Marsden, Sewell, and Gingras for Quebec; and E. P. Lachapelle, E. H. Trudel and R. A. Kennedy for Montreal.

RESORCINE IN THE TREATMENT OF WHOOPING COUGH.

Dr. Moncorvo, Professor of the Diseases of Children in the Polyclinique of Rio de Janeiro, in an article published in the March, April and May

issues of *Uniao Medica*, advocates the topical employment of Resorcine in the strength of one per cent., applied by a fine pencil brush to the larynx. He gives fourteen instructive cases, of various degrees of severity and duration, in which this remedy was found by him highly serviceable. He gives the following as his general conclusions :

1st. That whooping cough, whose nature, up to a very recent period, has been subjected to the most diverse interpretations, in relation to its genesis, may, to-day, according to the latest microscopic researches, be included in the class of parasitic diseases.

2nd. That the disease appears attributable to the presence of micrococci which multiply prodigiously in the hyperglottic vicinity of the larynx, infiltrating its epithelial cells, which appear to be the predilective seat of their development.

3rd. That resorcine, applied to the laryngeal mucous membrane, caused in all the cases in which it was employed, rapid decrease of the number of the paroxysms, moderation of their intensity, and finally recovery in a short period of time, without the aid of any other medication.

Dr. Moncorvo says that resorcine, owing to its much less caustic action, and the absence of disagreeable taste and odour, is far preferable to carbolic acid. He has administered it internally to children, even the newly born, suffering under diarrhoea and dysentery. He advises that strict attention be given to the quality, so as to secure the article in purity, and he recommends that prepared by Monnet, of Geneva, which is of notable whiteness, and in the form of silvery bright crystalline needles. It is extremely soluble in water. Dr. M. recommends the topical application with the fine pencil brush, to be repeated every two hours. The first applications, he says, sometimes exacerbate the coughing fits, but this irritation ceases in two or three days. In twenty cases treated by him, he was not disappointed in his expectation in a single instance, and some of them had been very obstinate, or even dangerously complicated, as with hereditary syphilis, threatened hydrocephalus, pulmonary tuberculosis, intermittent fever, etc.

Resorcine, in its source being a congener of carbolic acid, no doubt acts in a similar manner as a parasiticide. Dr. Moncorvo states that he has, by numerous microscopic examinations of the

sputa expectorated by his patients laboring under whooping cough, verified the statements made by Letzerich, Henke, Steiner, Hagenbash and other writers, as to the parasitic character, or complication of the disease. The treatment advocated by him is therefore free from all insinuation of empiricism, and as we understand the article to be inexpensive, it will no doubt soon be largely sought after.

THE editor of the *Sanitary Journal* has been examining the evidence for and against vaccination. He desires not to be regarded as opposed to vaccination, but he is somewhat sceptical and states that "after carefully examining and sifting all the obtainable evidence, *pro* and *con*, in regard to the measure, he fears that it has been and is too much extolled, and too much relied upon, to the comparative neglect of other, and more strictly scientific preventive measures." He refers to the unsatisfactory results of the practice in Switzerland, and points out that the two principal legislative measures relating to compulsory vaccination in Great Britain were enacted and came into force "on the decline of two great epidemic periods, such periods being invariably followed by a decline in the mortality;" and, that, notwithstanding the reduced mortality since enforced vaccination, as compared with that previous to it, "there has been a great increase in the proportion of deaths in London (E.) since the commencement of compulsory vaccination." He thinks that the great difference between the mortality from small-pox amongst vaccinated and that amongst unvaccinated persons may be largely accounted for by the character of most of the unvaccinated, who are he believes of the poorest classes, "the improvident, the unsettled—who would be most exposed to, and from their habits, prone to take the disease, and the very ones amongst whom by far the greatest mortality would most certainly take place in hospital, or anywhere." These are a few of the most important points. The writer gives instances where outbreaks of small-pox have been repeatedly stamped out without vaccination, by isolation, quarantine, &c. It has been stated that possibly the profession may have been looking too much to the statistics of one side of the question of the value of vaccination. No doubt vaccination affords some protection, and the difficulty is in getting other preventive measures thoroughly carried out,

FORDYCE BARKER'S TRIBUTE TO YOUNG MEN.—My own experience has been that from this class I learn the most; it is from them that I get the most useful knowledge and the most valuable suggestions. I hold it to be one of the great missions of this Academy to bring out and develop, by its library and its scientific work, the young men who are to take care of its interests and give the stamp of character to the Academy and the medical profession of this city in the future. I do not hesitate to express the belief, based on a rather extensive acquaintance with the profession in other cities and other countries, that the number of young men of bright intellects, of noble zeal, who have had the largest opportunities at home and abroad for a thorough and complete education, which have been most conscientiously improved, is greater than has ever before been aggregated in any city in any age of the world, and that twenty years hence New York will have a galaxy of distinguished men who will give the medical profession such prominence with the public and with the profession elsewhere as has never before been attained.—*N. Y. Medical Journal*.

[These noble sentiments, by a noble man, are in striking contrast with those members of the profession who occasionally object to a Medical Journal on the ground that it contains articles written by young men, whom these worthies seem to consider as desiring to air their newly acquired knowledge.—Ed.]

PLANS OF A MODERN COTTAGE.—Messrs. Paliser & Co. of Bridgeport, have lately issued a sheet containing plans and specifications for building a handsome six or eight room cottage with or without tower. The cost will vary from \$1,700 to \$3,000, according to size and style of finish. The publishers have found it the most popular plan they have ever issued, and state that it has been adopted in over five hundred houses. We have seen the plans and specifications referred to, and would recommend a perusal of them by those who contemplate building. This firm issues specifications in blank form for all kinds of buildings; also, forms of building contracts, and books on modern architecture.

HYPOSULPHITE OF SODA AS A DISINFECTANT.—The difficulty of finding a satisfactory disinfectant with which to destroy foetor in cases of cancerous ulcers, is well known. Dr. W. E. Buck, in the *Brit. Med. Journal*, says he has tried a saturated solution of hyposulphite of soda added to an equal quantity of water, and found it exceedingly efficacious. The

ulcerating surface was well syringed and washed with the solution, and was then covered with rags steeped in the solution. The granulations were kept clean, and the fœtor was well kept under. It is cleanly, has no smell, does not stain, and is very cheap.

F. R. C. P., LOND.—Dr. Wm. Osler, of McGill College, Montreal, has been elected a Fellow of the Royal College of Physicians, London. We congratulate our young and talented confrère upon this justly merited mark of distinction. There is only one other Fellow of the College resident in Canada, viz. : Dr. J. A. Grant, Sr., of Ottawa. We are pleased to note this recognition of industry and talent among our Canadian confrères by old-world institutions.

BACILLUS TUBERCULOSIS IN AN ABSCESS.—Dr. R. C. Smith (*Brit. Med. Journal*), gives the details of a case of phthisis in a clerk aged 21 years. An abscess formed in the ischio-rectal fossa which was opened. A microscopic examination of this fluid by a half-inch object-glass, after the usual process of staining, revealed the presence of great quantities of well-marked typical tubercle-bacillus.

OL. SANTALI FLAV. IN GONORRHOEA.—Most successful results have been obtained in the treatment of gonorrhœa by olum santali flav. The dose is 15 to 20 drops in gelatine capsules, mucilage, or dropped on sugar, three times a day. It usually arrests the discharge in two or three days, but should be continued for about two weeks to prevent a relapse.

ST. JOHN MEDICAL SOCIETY.—At the annual meeting of the St. John Medical Society, the following officers were elected for the ensuing year :—Dr. P. R. Inches, President ; Dr. James Christie, and Dr. G. L. Taylor, (of Hampton,) Vice-Presidents ; Dr. Wm. Christie, Treasurer ; and Dr. Geo. A. Hetherington, Secretary.

THE thirty-seventh annual meeting of the Association of Medical Superintendents of American Institutions for the Insane, opened at Newport, R. I., on the 26th July. Delegates were present from thirty States, and from the provinces of Quebec and New Brunswick. Dr. John P. Gray, of Utica, N. Y., was elected President for the ensuing year.

PERSONAL.—Dr. W. J. Robinson, of Fergus, has recently married the daughter of the late Dr. Orton, and commenced practice in Ancaster, Ont. Dr. W. H. Aikins, son of Governor Aikins, has returned from Vienna, and is now in Winnipeg, Man.

APPOINTMENTS.—Dr. W. F. McLean has been appointed Demonstrator of Anatomy in the London Medical College, and Dr. J. M. Jackson Assistant Demonstrator.

John Thomas Duncan, M.D., of this city, has been appointed Associate Coroner in and for the city of Toronto. Dr. Riddell's resignation has been accepted.

ERRATUM.—On page 344 of the July issue, for Dr. Drink read Dr. Druitt.

Books and Pamphlets.

A TREATISE ON FRACTURES, by Lewis A. Stimson, B.A., M.D., Professor of Surgical Pathology in the Medical Faculty of the University of the City of New York. Philadelphia: Henry C. Lea's Son & Co. Toronto: N. Ure & Co.

There are three things which especially recommend this little work to our favourable consideration ; its extremely practical character, its avoidance of unnecessary detail, and the unpretentiousness and absence of anything approaching egotism which the author displays. It does not purport to be so much the result of his own observations as a collection of those of others. To the student who needs a somewhat fuller account of fractures and their treatment than is to be found in the usual surgical text-books, it will be invaluable, as, except on the subject of compound fractures, on which the author has very little to say, it is full without being burdened with the cumbersome minutiae in which so many book-makers delight. The author has, wisely we think, followed no cast iron rules, and has left much to the good sense and discrimination of his readers. The first third of the book is devoted to the varieties, etiology, pathology, complications and treatment of fractures in general, which are then individually discussed at length. The chapter on fractures of the thigh is particularly exhaustive, and considerable space is given to Colles fracture. The varieties of splints and other me-

chanical appliances of a like nature, including some of the later inventions, are described and illustrated by wood-cuts, but the author has carefully avoided cumbering his pages with accounts of improved and unpractical methods and apparatuses. The author is a moderate believer in the plaster-of-Paris dressing, and devotes some space to the explanation of the preparation and application of its various forms. On the subject of anti-septic dressings he has very little to say, and limits himself to detailing the rules for their employment. The book is profusely illustrated, and contains a quantity of valuable statistics, which, like the illustrations, are in the main taken from Gurlt's work. Its principal shortcoming is the smallness of the space devoted to differential diagnosis

THE INTERNATIONAL ENCYCLOPEDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery, by authors of various nations. Edited by John Ashhurst, Jr., M.D., Prof. Clinical Surgery, University of Pennsylvania. Vol. III., 1883. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

This elaborate work, which will be completed in six volumes, has reached three volumes, the first and second of which have been favorably noticed in our pages. Our admiration for the work increases as it progresses. It is one of which its authors may well be proud. The present volume contains about 700 pages, and is presented in a most attractive form by the publishers. We are informed that this great international work is being translated and published in France and Italy. The volume before us treats in a masterly way, injuries and diseases of the various tissues, muscles, tendons, fasciæ, lymphatics, bloodvessels, vascular system, aneurisms, nerves and joints. Several chromo-lithographs embellish this volume. The complete work will form a valuable contribution to modern surgery. The editor, in conclusion, laments the death of one of his most distinguished collaborators, the late Prof. W. H. VanBuren, of New York.

INSANITY; ITS CAUSES AND PREVENTION. By H. P. Stearns, M.D., Superintendent of the Retreat for the Insane, Hartford, Conn. New York: G. P. Putnam & Sons.

This is a most valuable book. The author tells us in his preface, "it has not been written for spe-

cialists exclusively, though it is hoped it will not prove wholly uninteresting to them, but rather for those in the general practice of medicine, educators, and the more intelligent lay members of society."

It is beyond all question that to the last two classes its careful perusal would be unspeakably valuable, but especially the three chapters treating of education in its three important forms, of scholastic, industrial, and moral. The whole of these is so good and forcible that to attempt quotations would be nothing short of mutilation, and as the book is not a large one—only 248 pages of short octavo—and on excellent paper with very plain type, we would hope that it will find a place on every drawing room table. Parents, teachers and all persons interested in the future well-being of youth could not fail to derive instruction from its wise admonitions; nor could it be less profitable to the young, who would find in it much good advice on the important subjects of marriage, alcohol, tobacco, insufficient sleep, overwork of brain, religion, poverty, rest and recreation, etc., all written in very plain, clear language. In truth the book would be a household treasure.

ON THE DISPOSAL OF SEWAGE. Issued by the Provincial Board of Health. Toronto: Printed by C. Blackett Robinson.

This is No. 11 of the series of *brochures* issued by the Provincial Board of Health, and is, it may safely be said, the only document of any practical value published by that body since its inauguration. It is merely what its name implies, a brief *resumé* of the various methods of disposing of sewage, chiefly adapted from such works as those of Parkes, Wilson, Bayles, Waring and Latham, and is illustrated by several wood-cuts. The style is as simple as possible and entirely free from technological terms, so as to be comprehensible even to the most uninitiated. The pamphlet is a decided improvement upon its predecessors, and the appearance of a few more such would go far towards establishing the Board's reputation for doing something of value in the interest of public sanitation.

DIAGNOSIS OF OVARIAN CYSTS BY MEANS OF THE EXAMINATION OF THEIR CONTENTS. By H. J. Garrigues, A.M., M.D. New York: William Wood & Co. Toronto: Willing & Williamson.

This is a reprint in book form of the excellent papers on the above subject which appeared some time ago in the *Obstetrical Journal*.

